



Catalog 2016/17

Liquid Handling, Sample Handling, Cell Handling



Eppendorf mobile

The mobile App from Eppendorf with product information, news and many useful tools for the lab. Now available for free download in the Apple® App Store® and on Google Play®.



Dear customers,

We have been developing and producing well thought-through, groundbreaking products and solutions in the areas of Liquid Handling, Cell Handling and Sample Handling for more than 70 years. We always had one goal in mind: to make your job in the lab easier and more efficient. To continue on this path, we have once again prepared a whole range of new developments for you this year that will make your work in the lab even more efficient.

Dispensing with reduced operating effort. The new electronic manual dispensers **Repeater® E3 and E3x** are motor-powered, require very low effort during operation and thus help reduce repetitive strain to a minimum. These direct displacement pipettes not only make dispensing safe and easy; they are also the perfect partner for applications such as titration or the aspiration of supernatants. Read more on page 64.

Organize your storage space better. With the **Eppendorf Storage Boxes**, there is now a systematic solution for storing your samples. They optimize sample handling by offering safe, clearly arranged and space-saving storage. See page 182 for information on tube sizes and to find out about other advantages.

New in our catalog: Bioprocessing technology. For the first time, the complete Eppendorf catalog now also includes a chapter on bioprocessing technology. It gives you an overview of our cell culture and microbiology solutions. The product portfolio includes bioreactors and fermenters for research and development as well as production scale instruments. Our bioprocessing specialists will be happy to help you find your ideal solution. More information on page 462.

Next Generation Sequencing. We've been studying daily work processes in laboratories for decades. The results helped us to further develop our product portfolio. Our next generation DNA sequencing workflows are of course also based on this know-how. Go to page 6 to learn how.

We take ergonomics seriously. Ergonomics is important to us. This is why we pay particular attention to developing ergonomic products. Products with especially ergonomic properties are marked with our **PhysioCare Concept®** logo. Refer to page 8 to learn how the PhysioCare Concept can help improve the quality of your life and work.

Always up-to-date with epServices. Are you new to the lab world or an experienced user? No matter which, our comprehensive service and training program "epServices" provides you with the latest information on your applications. Please see the corresponding product sections for information on our highly qualified training programs.

Eppendorf is going mobile. Did you install the Eppendorf App on your tablet or smartphone yet? With the App for iOS® and Android® you have quick and easy access to our digital catalog – including operating manuals or application notes. As a bonus, it offers useful tools for everyday labwork, such as parallel operation lab timers, a codon translator and calculators for typical routine applications. To install the App, simply scan the QR code on the left side.

Any questions or suggestions? You can reach your **local contact**, via App or on our webpage. We are looking forward to hearing from you!

Your Eppendorf group Management Board

Thomas Bachmann

Detmar Ammermann

Dr. Ralf Hermann

Dr. Wilhelm Plüster

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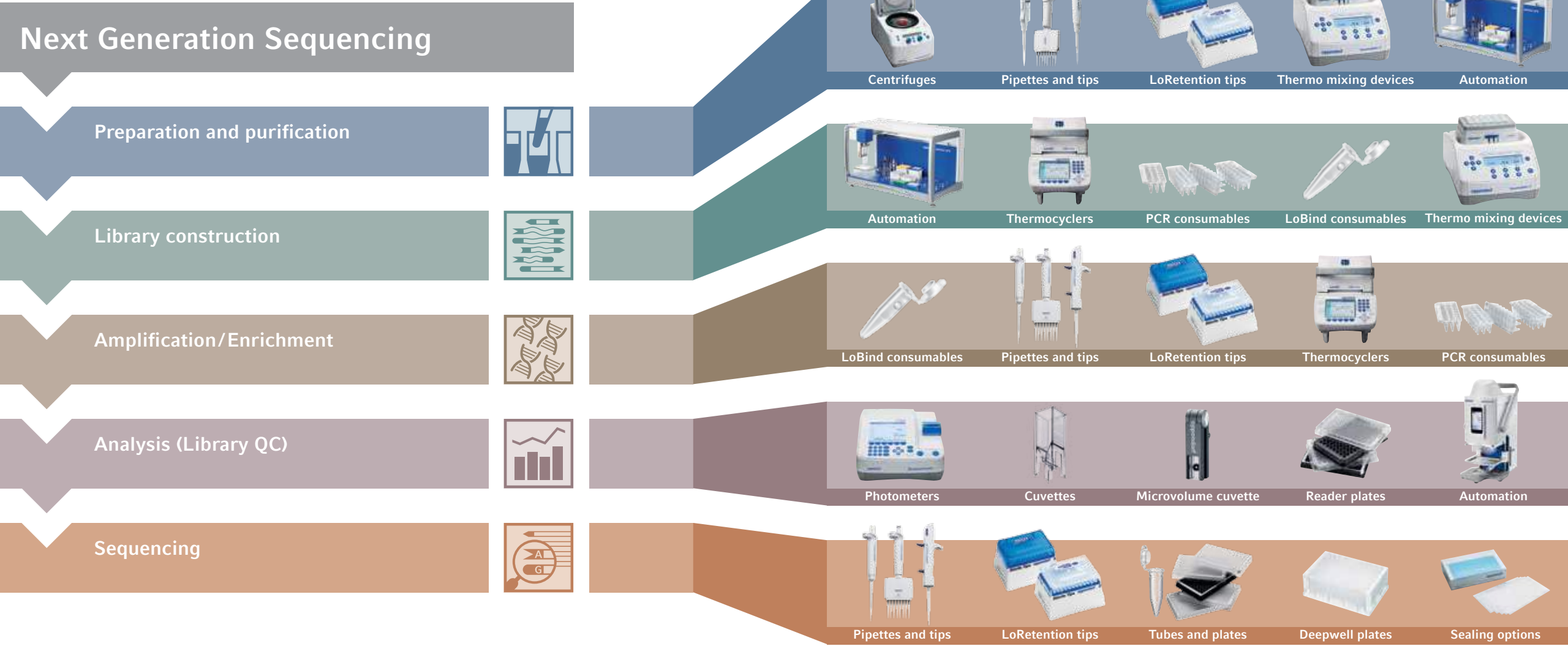
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Eppendorf for Central Work Steps in Your Laboratory



Workflow Next Generation Sequencing

DNA sequencing is a method commonly used to determine the base sequence of nucleic acids. Analysis of the DNA sequence is the foundation for the understanding of nearly all biological processes, e.g. metabolic diseases and inherited diseases, as well as for the understanding of immune reactions. Furthermore, these discoveries are important in cancer research as well as for decoding common biological processes at the cellular level. The instruments of the first generation of sequencers relied on the principle of capillary electrophoresis and the Sanger sequencing method. The introduction of the Next Generation Sequencing (NGS) method has since enhanced this platform. Thus, sample throughput, speed and the method itself, as well as the resolution of the results, have been improved

considerably. Nowadays, NGS allows parallel sequencing of multiple reactions. This not only helps save money and time, but it also increases overall sequencing speed.

Please see below for examples of Eppendorf products designed for the NGS workflow:

Purification

For sample purification of DNA or proteins, for example, spin columns, magnetic beads or vacuum processes are available in manual or automated formats. The automated liquid handling workstation Eppendorf epMotion® enables higher throughput sample purification with improved reproducibility, offering a vacuum chamber or a platform to purify samples with magnetic beads.

For manual purification, we recommend the special Eppendorf Kit rotor®, available for the Centrifuges 5424/5424 R, 5427 R and 5430/5430 R. This rotor type features an elevated rim, optimized for centrifugation of spin columns. It supports the lids of those tubes into which the eluate is transferred from the column and thus prevents lids from shearing off during centrifugation.

Amplification

Following nucleic acid purification, the next steps are amplification for the purpose of library construction, or concentration of the nucleic acids for subsequent sequencing. Specific sequences are precisely amplified using PCR. In order to establish a stable and reproducible PCR, knowledge of the optimal experimental conditions is critical. This is where the

gradient cyclers Mastercycler® pro or Mastercycler® nexus enter the stage. In just one single experiment the temperature gradient function of these two instruments is capable to determine the optimum temperature for primer annealing. This saves valuable time and guarantees stable experimental conditions.

Additional products for the NGS workflow as well as other workflow solutions are available at: www.eppendorf.com/workflows

The Eppendorf PhysioCare Concept®

The mission of Eppendorf has always been to improve the living conditions of their customers. Nowadays where people spend a lot of their time at work, the ergonomics of their tools and the whole work environment is becoming more important for their well-being. Thus the development of each Eppendorf pipette is based on three spheres that support the health of their customers.

Each of these spheres offers stringent ergonomic criteria which are directly involved in the users work process:



Sphere 1–The User
Sphere 2–The Lab
Sphere 3–The Laboratory Workflow



Sphere 1–The User:
The PhysioCare Concept guarantees an ergonomic design and an optimized product performance according to the needs of the individual.



Sphere 3–The Laboratory Workflow:
The PhysioCare Concept ensures general support to enhance processes around the lab and improve the results of the whole organization.



Further information: www.eppendorf.com/physiocare



Sphere 2–The Lab:
The PhysioCare Concept allows the uncomplicated integration of instruments in the lab as well as adhering to its specific requirements.





More Than Reliable Products

eppendorf

Performance tested on

Model: _____

Serial no.: _____

Serviced by: _____

Service no.: _____

Next service: _____

Date: _____

epServices
for premium performance



- > **Application support**
Our specialists are here to help
- > **Technical support**
Contact your local technical support
- > **Quality and regulatory support**
Clarify all questions on quality or regulatory matters
- > **Training**
Increase your knowledge and abilities
- > **Installation and Operational Qualification (IQ/OQ)**
Be prepared for your audits
- > **Preventive maintenance**
Keep your instruments in top working order
- > **Calibration and validation**
Ensure that your instruments are functioning precisely and accurately

Premium services for your lab
Preventive maintenance ensures system reliability by early detection and solving of problems. Our certification packages provide calibration, verification, Installation Qualification/ Operational Qualification (IQ/OQ) services for your instruments ensuring precision and accuracy according to manufacturer or customer requirements. Complete documentation is provided in compliance with legal guidelines and standards.

A comprehensive range of service programs including preventive maintenance and certification services build the basis for the premium support from Eppendorf worldwide. These services - from economical to worry-free packages - are available through Eppendorf Performance Plans for your instruments and pipettes.

For further information please visit
www.eppendorf.com/epServices

Eppendorf Training Center

Optimally serviced premium products alone do not provide for reliable results. The operator’s experience is just as important. With the new Eppendorf Training Center, we extend your knowledge to ensure that you use the full potential of our products in the most efficient and easy way. In our practice oriented seminars, you will learn the operation of our devices, understand specific workflows and receive valuable assistance to run applications in your lab properly. Eppendorf application specialists will support you in small groups. Learn something new or replenish your knowledge and get your certificate for successful participation.

Find more information about our training offering at www.eppendorf.com/training



Relax a moment and watch this short video:
Scan the QR code or go to
www.eppendorf.com/pipette-video



New Highlights 2016

LIQUID HANDLING



Eppendorf Repeater® E3/E3x - see page 64

In 1979, 17 years after introducing the first piston-stroke pipette, Eppendorf revolutionized the Life Science Market again – always having customer needs in mind. The first positive-displacement pipette, the Repeater, made serial pipetting without repeated liquid aspiration possible. Since then several generations of mechanical and electronic Repeaters have facilitated your daily laboratory work. We now introduce our new electronic Repeater E3 and E3x. Read how a Repeater makes your everyday routines faster and easier.

SAMPLE HANDLING



Centrifuge 5920 R - see page 240

Eppendorf centrifuges go beyond speed and capacity – to offer unparalleled ergonomic operation, superior temperature management, and outstanding quality. We are now proud to introduce the newest member of the multipurpose centrifuge family – 5920 R. This refrigerated centrifuge has similar dimensions as other 3 liter models yet has an extraordinary capacity of up to 4 x 1 Liter bottles, making it ideal for large volume applications. It features a powerful state-of-the-art refrigeration system with advanced temperature management to keep your samples safe.

CELL HANDLING



A new family of Micromanipulators – see page 352

Our new family of electronic micromanipulators, the TransferMan® 4r and InjectMan® 4, combine an intuitive user interface with unprecedented movement control. The TransferMan® 4r and InjectMan® 4 provide an ideal platform for a wide variety of micromanipulation applications. Similarly, the new TransferMan® 4m is an ideal tool for demanding applications in the field of *in vitro* fertilization. The TransferMan 4m is classified in the United States as an assisted reproduction micromanipulator and microinjector medical device under 21 CFR 884.6150.

Trade Show Highlights 2016/2017

We are the expert on-site for you – Eppendorf is represented at more than 100 trade show and congresses per year. You can thus see our products live around the world and experience their quality and performance. Apart from our new products, we also present end-to-end solutions for a more efficient, easier and therefore more pleasant laboratory routine. Come and visit us. We look forward to meeting you!

North America

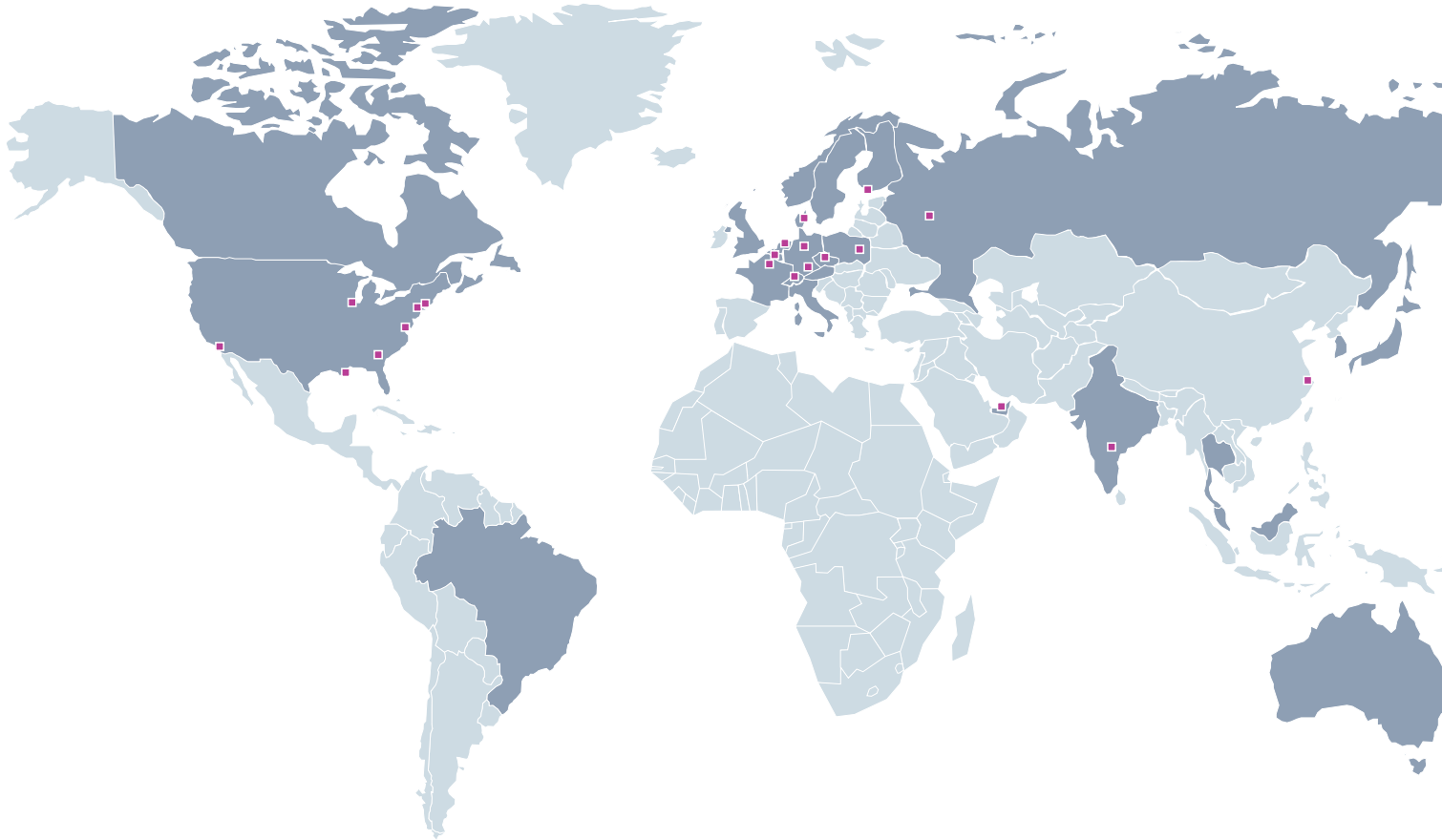
SLAS 2016	SLAS 2017
San Diego, CA	Washington, DC
January 23 – 27, 2016	February 4 – 8, 2017
Pittcon 2016	Pittcon 2017
Atlanta, GA	Chicago, IL
March 6 – 10, 2016	March 5 – 10, 2017
Interphex® 2016	Interphex® 2017
New York, NY	Dates currently unavailable
April 26 – 28, 2016	
ASM Microbe 2016	ASM Microbe 2017
Boston, MA	New Orleans, LA
June 16 – 20, 2016	June 1 – 5, 2017
Bioprocess International 2016	Bioprocess International 2017
Boston, MA	Dates currently unavailable
October 4 – 7, 2016	
Society for Neuroscience 2016	Society for Neuroscience 2017
San Diego, CA	Washington DC
November 12 – 16, 2016	November 11 – 15, 2017

International

Arab Health	
Dubai, United Arab Emirates	
January 25 – 27, 2016	
Laborama® 2016	Laborama® 2017
Brussels, Belgium	Brussels, Belgium
March 17 – 18, 2016	March 16 – 17, 2017
Transgenic Technology Meeting	
Prague, Czech Republic	
March 20 – 23, 2016	
Eurolab	
Warsaw, Poland	
April 12 – 14, 2016	
in-cosmetics®	
Paris, France	
April 12 – 14, 2016	
Analitika Expo	
Moscow, Russia	
April 12 – 14, 2016	

analytica®
Munich, Germany
May 10 – 13, 2016
ESHRE
Helsinki, Finland
July 3 – 6, 2016
Ilmac®
Basel, Switzerland
September 20 – 23, 2016
LabMed®
Copenhagen, Denmark
September 27 – 29, 2016

WoTS
Utrecht, Netherlands
October 4 – 7, 2016
analytica China
Shanghai, China
October 10 – 12, 2016
analytica Anacon India/ India Lab Expo
Hyderabad, India
December, 2016
Biotechnica 2017
Hannover Germany
May 16 – 18, 2017

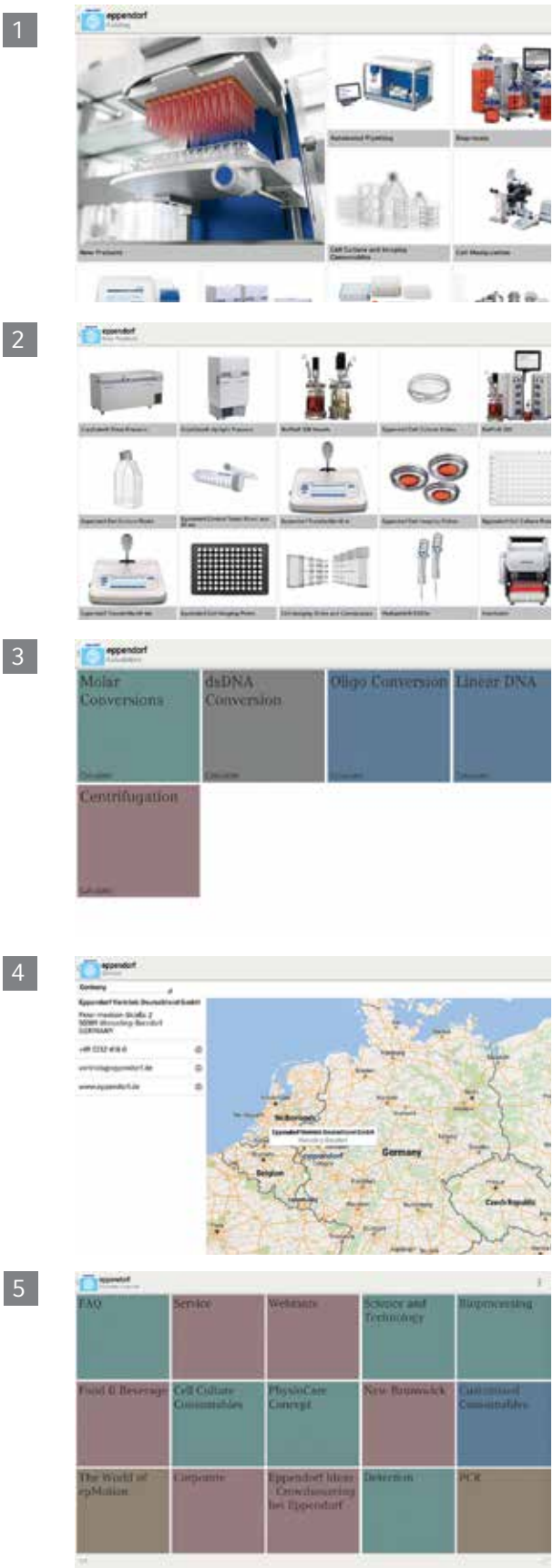


An overview of the Eppendorf App



Download the App now for free to enjoy the continuously growing range of functions such as 360° views of our products or an augmented reality application, which allows you to view our most recent product highlights virtually in 3-D.

www.eppendorf.com/apps



New products
> Here you can get informed about the most recent products. This way you will always be up-to-date.

Catalog
> Here you can find information on all Eppendorf products. Where available, you will also find graphics, 360° animations and videos about the products, as well as information material such as operating manuals, brochures, etc.
> Thanks to the direct connection to our online shop, you can also buy the products directly at any time.

Tools, calculators and lab timers
> In order to make your daily routine easier, we offer tools such as a multi-alarm timer or a cell counter. We continuously add useful new tools to this choice.

Contact and Feedback
> Contact a distributor near you or take the opportunity to share your opinion or ask a question. We will also be happy to receive any suggestions on how to expand or improve the Eppendorf App.

YouTube® channel
> Here you can watch different videos about our products. They are sorted by topic and offer important information and suggestions.

Liquid Handling



Trailblazer in liquid handling for more than 50 years ...

In 1961, Eppendorf launched the first piston-stroke pipette. Today, our broad product offerings in liquid handling range from manual pipettes to electronic pipettes, dispensers and burettes to automated pipetting systems. Eppendorf products are associated with state-of-the-art technology, outstanding ergonomics and award-winning design. This applies to both devices and the requisite consumables such as pipette tips and Combitips®.

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Page	27	22	32	90	60
Model	Research plus	Reference 2	Xplorer/ Xplorer plus	epMotion® 96	Repeater® M4
Product type	Pipette	Pipette	Pipette	Pipette	Dispenser
Operation	manual, separate control button and ejector	manual, combined control button and ejector	electronic, separate control button and ejector	electronic, semi-automated	manual with digital display
Pipetting type	air-cushion	air-cushion	air-cushion	air-cushion	positive displacement
Available options	1-channel 8-channel 12-channel	1-channel 8-channel 12-channel	1-channel 8-channel 12-channel	96-channel	1-channel
Application	pipetting of aqueous liquids	pipetting of aqueous liquids	pipetting of aqueous liquids	intuitive and fast pipetting in 96 and 384 format	contamination- free dispensing (up to 100 steps per Combitip filling) of aqueous, viscous and volatile liquids
Volume range	0.1 µL–10 mL	0.1 µL–10 mL	0.5 µL–10 mL	0.5–300 µL	1 µL–10 mL
Description	2 button operation. Lightweight design with spring-loaded nose cone and liquid class adjustment.	1 button operation. Lightweight design with volume lock to limit accidental volume changes.	Multifunction pipette with easy-to-use selection dial and digital display for intuitive operation	96-channel pipette with easy to use iOS interface and intuitive Xplorer- like software	Reliable device for repetitive tasks with aqueous, viscous, or high vapor pressure liquids
RFID tracking	yes (read option)	yes (read & write option)	yes (read & write option)	no	yes (read option)
Autoclavable	yes	yes	yes (lower part only)	no	no
Warranty	3 years	3 years	2 years	1 year	3 years
Consumables	epT.I.P.S.® and other pipette tips	epT.I.P.S. and other pipette tips	epT.I.P.S. and other pipette tips	epT.I.P.S. <i>Motion</i> reloads	Combitips advanced®
Purity grades of consumables	> Eppendorf Quality™ > Sterile > PCR clean > Eppendorf Biopur	> Eppendorf Quality > Sterile > PCR clean > Eppendorf Biopur	> Eppendorf Quality > Sterile > PCR clean > Eppendorf Biopur	> Eppendorf Quality > Sterile > PCR clean > PCR clean & sterile	> Eppendorf Quality™ > Sterile > PCR clean > Eppendorf Biopur®

Product appearance, specifications, and/or prices are subject to change without notice.



						
64	74	75	81	76	80	94
Repeater E3/E3x	Biomaster®	Maxipettor®	Varispenser®/ Varispenser plus™	Easypet® 3	Eppendorf Pipet Helper®	epMotion® 5070, 5073, 5075
Dispenser	Pipette	Pipette	Bottle-top dispenser	Pipette controller	Pipette controller	Automated Liquid Handling
electronic	manual, combined control button and ejector	mechanical	manual	electronic	mechanical	electronic, fully automated
positive displacement	positive displacement	positive displacement	air-cushion	air-cushion	air-cushion	air-cushion
1-channel	1-channel	1-channel	1-channel	1-channel	1-channel	1-channel 8-channel Gripper to move serial pipetting of aqueous, viscous and volatile liquids
contamination- free dispensing (up to 100 steps per Combitip filling) of aqueous, viscous and volatile liquids	pipetting of aqueous, viscous and volatile liquids	contamination- free pipetting of aqueous, viscous and volatile liquids	single stroke dispensing of acids, bases and other aqueous liquids	pipetting of aqueous liquids	pipetting of aqueous liquids	
1 µL–50 mL	1–20 µL	1–10 mL	0.5–100 mL	0.1–100 mL	0.1–100 mL	1 µL–1 mL
Multifunction device with easy-to-use selection dial for repetitive tasks with aqueous, viscous, or volatile liquids	Adjustable positive displacement pipette for accurate, contamination- free pipetting	Macrovolume pipette designed for working with tall or narrow vessels	Chemically resistant, fully autoclavable instruments for dispensing liquid from supply and reagent bottles	Lightweight, easy-to-use pipette with unique speed adjustment for ultimate meniscus control	The perfect instrument for inexperienced users because of its robust and intuitive design	Automated pipetting with intuitive programming and the highest precision and accuracy
yes (read & write option)	no	no	no	yes (read option)	no	no—but chip tool identification & calibration warning
no	yes	no	yes	yes: pipette adapter and aspirating cone only	yes	yes (tools only)
2 years	2 years	2 years	2 years	2 years	6 months	epMotion–1 year/ tools–2 years
Combitips advanced	Mastertips	Maxitips	–	Eppendorf Serological Pipets and other volumetric and serological pipets	Eppendorf Serological Pipets and other volumetric and serological pipets	epT.I.P.S. <i>Motion</i> tips as racks or reloads
> Eppendorf Quality > Sterile > PCR clean > Eppendorf Biopur	> Eppendorf Quality	> Eppendorf Quality	–	> Sterile > free of detectable RNase & DNase > free of detectable pyrogens > free of detectable DNA	> Sterile > free of detectable RNase & DNase > free of detectable pyrogens > free of detectable DNA	> Eppendorf Quality > Sterile > PCR clean > PCR clean & sterile

Eppendorf Reference® 2



i For more information go to www.eppendorf.com/Reference2

- 1. Single button operation:** Quick and easy tip ejection immediately following dispensing saves unergonomic side movement of thumb and actively reduces aerosols re-entering the pipette
- 2. Robust design:** Sturdy upper handle including stainless steel and bumper system guarantees long service life and increased robustness
- 3. Volume setting:** Quick and secure volume setting including volume lock to prevent unwanted changes. 4-digit display for accurate volume setting.
- 4. User adjustment:** Option to temporarily adjust the pipetting volume by up to $\pm 2\%$ to offset inaccuracies when working with difficult liquids (e.g., warm, cold, volatile or high density liquids). Return to factory adjustment without calibration.
- 5. Easy to clean surface:** Smooth surface without grooves where bacteria could hide allows easy and safe cleaning
- 6. Eppendorf TrackIT:** Embedded RFID data chip for heightened traceability in combination with Eppendorf TrackIT
- 7. Serial number traceability:** Serial number is printed on upper and lower part to avoid a mixup of volume determining parts
- 8. Fully autoclavable:** Fully autoclavable without disassembly
- 9. Spring loaded tip cone:** Improves ergonomics by lowering tip attachment forces and reproducibility by ensuring consistent tip attachment
- 10. Highest precision and accuracy:** in the Eppendorf portfolio provides reliable pipetting results



4-digit volume display to allow for more accurate volume setting.

Description
The Eppendorf Reference 2 is the newest pipette family at Eppendorf and it is our premium product. Besides improvement of its ergonomics the focus of its design lay on providing the most accurate results possible, optimum user safety, reliability and robustness for a long service life. The innovative single button operation is not only fast and easy, but it also allows active aerosol reduction and thus protects the user, the sample and the pipette. The sturdy handle manufactured with stainless steel protects the pipette from impact and in combination with the spring loaded bumpers the Reference 2 is likely to stay within calibration even if it takes a fall. These high levels of security make the Reference 2 ideal



One of a kind: The only single button multichannel pipette in the world for faster pipetting and active aerosol reduction.

for use with precious liquids, or in any application requiring extremely high levels of accuracy. When there can be no compromise on quality and reproducibility, Eppendorf's new Reference 2 is an ideal instrument for these liquid handling applications.

- Applications**
- > Pipetting liquids
 - > Mixing liquids
 - > Filling of plates, gels, and reaction vessels
 - > Phase extraction and removal of supernatants

Ordering information							
Volume range	Color code	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
Eppendorf Reference® 2, single-channel, fixed							
1 µL	dark gray	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL	4921000010	\$326.00
2 µL	dark gray	±2.0 %	±0.04 µL	±1.2 %	±0.024 µL	4921000028	326.00
5 µL	medium gray	±1.2 %	±0.06 µL	±0.6 %	±0.03 µL	4921000036	326.00
10 µL	medium gray	±1.0 %	±0.1 µL	±0.5 %	±0.05 µL	4921000044	326.00
20 µL	light gray	±0.8 %	±0.16 µL	±0.3 %	±0.06 µL	4921000060	326.00
10 µL	yellow	±1.2 %	±0.12 µL	±0.5 %	±0.05 µL	4921000052	326.00
20 µL	yellow	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	4921000079	326.00
25 µL	yellow	±1.0 %	±0.25 µL	±0.3 %	±0.075 µL	4921000087	326.00
50 µL	yellow	±0.7 %	±0.35 µL	±0.3 %	±0.15 µL	4921000095	326.00
100 µL	yellow	±0.6 %	±0.6 µL	±0.2 %	±0.2 µL	4921000109	326.00
200 µL	yellow	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	4921000117	326.00
200 µL	blue	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	4921000125	326.00
250 µL	blue	±0.6 %	±1.5 µL	±0.2 %	±0.5 µL	4921000133	326.00
500 µL	blue	±0.6 %	±3.0 µL	±0.2 %	±1.0 µL	4921000141	326.00
1,000 µL	blue	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL	4921000150	326.00
2 mL	red	±0.6 %	±0.012 mL	±0.2 %	±0.004 mL	4921000168	326.00
2.5 mL	red	±0.6 %	±0.015 mL	±0.2 %	±0.005 mL	4921000176	326.00

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



Eppendorf Reference® 2

Ordering information								
Volume range	Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Reference® 2, single-channel, variable, incl. epT.I.P.S.® Box and holder for pipette carousel								
0.1–2.5 µL	 dark gray	0.1 µL	±48.0 %	±0.048 µL	±12.0 %	±0.012 µL	4920000016	\$433.00
		0.25 µL	±12.0 %	±0.03 µL	±6.0 %	±0.015 µL		
		1.25 µL	±2.5 %	±0.031 µL	±1.5 %	±0.019 µL		
		2.5 µL	±1.4 %	±0.035 µL	±0.7 %	±0.018 µL		
(0.002 µL)								
0.5–10 µL	 medium gray	0.5 µL	±8.0 %	±0.04 µL	±5.0 %	±0.0025 µL	4920000024	433.00
		1.0 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5.0 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.10 µL	±0.4 %	±0.04 µL		
(0.01 µL)								
2–20 µL	 light gray	2.0 µL	±3.0 %	±0.06 µL	±1.5 %	±0.03 µL	4920000032	433.00
		10 µL	±1.0 %	±0.10 µL	±0.6 %	±0.06 µL		
		20 µL	±0.8 %	±0.16 µL	±0.3 %	±0.06 µL		
(0.02 µL)								
2–20 µL	 yellow	2.0 µL	±5.0 %	±0.10 µL	±1.5 %	±0.03 µL	4920000040	433.00
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL		
(0.02 µL)								
10–100 µL	 yellow	10 µL	±3.0 %	±0.3 µL	±0.7 %	±0.07 µL	4920000059	433.00
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
(0.1 µL)								
20–200 µL	 yellow	20 µL	±2.5 %	±0.5 µL	±0.7 %	±0.14 µL	4920000067	433.00
		100 µL	±1.0 %	±1.0 µL	±0.3 %	±0.3 µL		
		200 µL	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL		
(0.2 µL)								
30–300 µL	 orange	30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL	4920000075	433.00
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
(0.2 µL)								
100–1,000 µL	 blue	100 µL	±3.0 %	±3.0 µL	±0.6 %	±0.6 µL	4920000083	433.00
		500 µL	±1.0 %	±5.0 µL	±0.2 %	±1.0 µL		
		1,000 µL	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL		
(1 µL)								
Eppendorf Reference® 2, single-channel, variable, incl. epT.I.P.S.® sample bag and holder for pipette carousel								
0.25–2.5 mL	 red	0.25 mL	±4.8 %	±0.012 mL	±1.2 %	±0.003 mL	4920000091	433.00
		1.25 mL	±0.8 %	±0.010 mL	±0.2 %	±0.0025 mL		
		2.5 mL	±0.6 %	±0.015 mL	±0.2 %	±0.005 mL		
(2 µL)								
0.5–5 mL	 violet	0.5 mL	±2.4 %	±0.012 mL	±0.6 %	±0.003 mL	4920000105	433.00
		2.5 mL	±1.2 %	±0.030 mL	±0.25 %	±0.006 mL		
		5.0 mL	±0.6 %	±0.030 mL	±0.15 %	±0.0075 mL		
(5 µL)								
1–10 mL	 turquoise	1.0 mL	±3.0 %	±0.030 mL	±0.6 %	±0.006 mL	4920000113	433.00
		5.0 mL	±0.8 %	±0.040 mL	±0.2 %	±0.010 mL		
		10.0 mL	±0.6 %	±0.060 mL	±0.15 %	±0.015 mL		
(10 µL)								

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to www.eppendorf.com/Reference2

➤ Pipette service and maintenance contracts can be found on page 86. Pipette tips can be found on page 42 onward.



Ordering information									
Volume range		Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD	
(Increments)									
Eppendorf Reference® 2 , 8-channel, variable, incl. holder for pipette carousel									
0.5–10 µL	 medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	4922000013	\$1,062.00	
		1.0 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL			
		5.0 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL			
		(0.01 µL)	10.0 µL	±2.0 %	±0.2 µL	±1.0 %			±0.1 µL
10–100 µL	 yellow	10.0 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	4922000030	1,062.00	
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL			
		(0.1 µL)	100 µL	±0.8 %	±0.8 µL	±0.3 %			±0.3 µL
		30–300 µL	 orange	30 µL	±3.0 %	±0.9 µL			±1.0 %
150 µL	±1.0 %			±1.5 µL	±0.5 %	±0.75 µL			
(0.2 µL)	300 µL			±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		
Eppendorf Reference® 2 , 12-channel, variable, incl. holder for pipette carousel									
0.5–10 µL	 medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	4922000021	1,258.00	
		1.0 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL			
		5.0 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL			
		(0.01 µL)	10.0 µL	±2.0 %	±0.2 µL	±1.0 %			±0.1 µL
10–100 µL	 yellow	10.0 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	4922000048	1,258.00	
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL			
		(0.1 µL)	100 µL	±0.8 %	±0.8 µL	±0.3 %			±0.3 µL
		30–300 µL	 orange	30 µL	±3.0 %	±0.9 µL			±1.0 %
150 µL	±1.0 %			±1.5 µL	±0.5 %	±0.75 µL			
(0.2 µL)	300 µL			±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



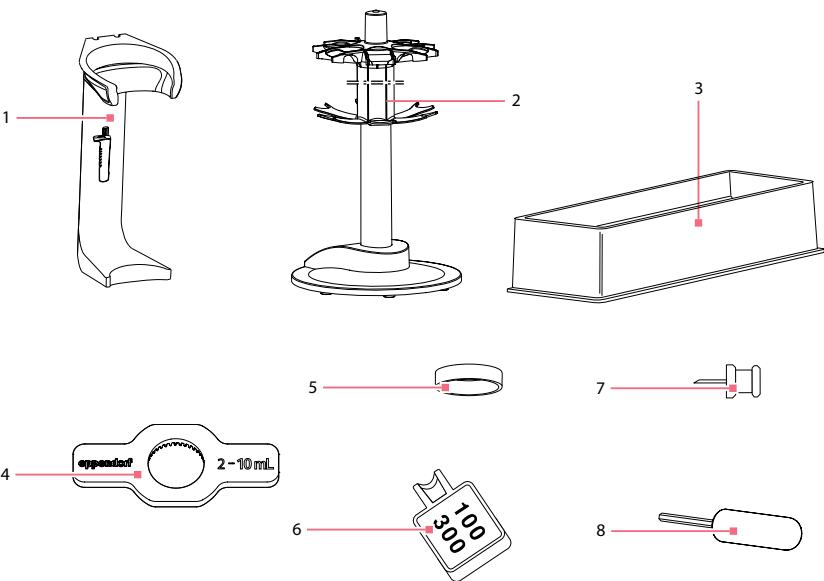
Description

Comfortable, high precision pipetting is the result of perfect teamwork between the pipette and tip. Why not rely upon the excellent team of Eppendorf Reference 2 pipettes and epT.I.P.S. Now conveniently available as Reference 2 3-, 4-, or 6-pack at a special price that’s too good to miss! In addition to Reference 2 pipettes, each pack contains one Eppendorf ballpoint pen.

Ordering information		
Description	Catalog No.	List USD
3-pack includes 3 single-channel, adjustable-volume pipettes and 1 full box of Eppendorf epT.I.P.S.® for each pipette ¹⁾		
Volumes: 0.5–10, 10–100 and 100–1,000 µL (Option 1)	4920000903	\$1,025.00
Volumes: 2–20 ²⁾ , 20–200 and 100–1,000 µL (Option 2)	4920000911	1,025.00
Volumes: 100–1,000 µL, 0.5–5 mL and 1–10 mL (Option 3)	4920000920	1,025.00
4-pack includes 4 single-channel, adjustable-volume pipettes, 1 full box of Eppendorf epT.I.P.S. for each pipette		
Volumes: 0.1–2.5, 0.5–10, 10–100 and 100–1,000 µL	492000904	1,415.00
Volumes: 0.1–2.5, 2–20 ²⁾ , 20–200 and 100–1,000 µL	492000905	1,415.00
Volumes: 0.5–10, 2–20 ²⁾ , 20–200 and 100–1,000 µL	492000906	1,415.00
6-pack includes 6 single-channel, adjustable-volume pipettes, 1 full box of Eppendorf epT.I.P.S. for each pipette ¹⁾ and 1 carousel stand ³⁾		
Volumes: 0.1–2.5, 0.5–10, 2–20 ³⁾ , 10–100, 20–200 and 100–1,000 µL	492000907	2,110.00
Volumes: 0.5–10, 10–100, 30–300, 100–1,000 µL, 0.5–5 mL and 1–10 mL	492000908	2,110.00

¹⁾ Excludes 5 mL and 10 mL pipettes. ²⁾ The 2 -20 µL pipette included has the yellow operating button. ³⁾ Carousel stand included in delivery package.

Eppendorf Reference® 2



- 1. Holder or wall mount
- 2. Pipette carousel
- 3. Reagent reservoir Tip-Tub
- 4. Key for detachment
- 5. Locking ring
- 6. Cutting tool
- 7. Pin
- 8. Adjustment tool

Accessories		
Description	Catalog No.	List USD
Pipette carousel, with 6 holders, for Eppendorf Reference® 2	4923000009	\$152.00
Holder, for Eppendorf Reference® 2, for pipette carousel	4923601002	26.00
Wall mount, for Eppendorf Reference® 2, with hook and loop strip	4923000017	34.00
Eppendorf Reference® 2 red adjustment seal ADJ, incl. pin for removing the inserted seal, 1 set = 5 pieces	4920626004	10.78
Eppendorf Reference® 2 red safety plug, incl. pin for removing the inserted safety plug, 1 set = 5 pieces	4920625008	14.56
Adjustment tool, for changing factory or secondary user adjustment	3120633006	11.30
Eppendorf Reference® 2 protection filter 2.5 mL, 10 filters with 1 filter sleeve, for 0.25 – 2.5 mL variable, 2 mL fixed volume, 2.5 mL fixed volume, color code red	4920622009	17.90
Eppendorf Reference® 2 protection filter 5 mL, 10 filters with 1 filter sleeve, for 0.5 – 5 mL variable, color code violet	4920623005	17.90
Eppendorf Reference® 2 protection filter 10 mL, 10 filters with 1 filter sleeve, for 1 – 10 mL variable, color code turquoise	4920624001	17.90
O-ring for tip cones, 24 pcs., red, for 100 and 300 µL multi-channel pipettes, with mounting aid (1 set = 24 pieces)	3122611000	29.00
Cutting tool, for O-rings of 100 and 300 µL multi-channel pipettes	3122610003	11.30
Key for detachment of 2–10 mL pipettes lower parts	3120634002	11.30
Locking ring, to prevent spring action of 2.5 µL to 1,000 µL single channel pipettes tip cones	3120635009	6.50
Tip-Tub reagent reservoir 70 mL, autoclavable reservoir for aspirating liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	022265806	45.90
Pipette grease with lint-free applicator	0013022153	25.20
Eppendorf TrackIT, RFID Reader and Software	3903000014	625.00

i For more information go to www.eppendorf.com/Reference2

➤ Pipette service and maintenance contracts can be found on page 86. Pipette tips can be found on page 42 onward.

Eppendorf Research® plus



- 1. **Control Button:** Very low operating forces and color coding for easy identification of pipette volume. Ergonomic height even at maximum volume to limit strain on thumbs
- 2. **Volume Setting:** Set your desired volume in just a few turns even when moving from minimum to maximum volume
- 3. **Ejector:** Very low operating force and positioned in such a way that thumb strain is reduced when moving to eject tips
- 4. **Volume Display:** 4 digit display with magnifying window to allow for more accurate volume setting and easier volume identification
- 5. **User Adjustment:** Option to temporarily adjust the pipetting volume by up to $\pm 2\%$ to offset inaccuracies when working with difficult liquids (e.g., warm, cold, volatile or high density liquids). Return to factory adjustment without calibration.
- 6. **Eppendorf PerfectPiston®:** Ultralight, chemically resistant piston provides for overall weight reduction of the pipette
- 7. **Quick lock:** Simply push up on the collar holding the lower part in place to remove for easy cleaning and maintenance of your pipette
- 8. **Spring loaded tip cone:** Improves ergonomics by lowering tip attachment forces and reproducibility by ensuring consistent tip attachment





Eppendorf Research® plus



4-digit volume display to allow for more accurate volume setting.



Description

The Eppendorf Research plus is one of the most commonly used pipettes in the world. Besides safety and robustness the main focus of its design lay on ergonomics. The Research plus protects the health of our customers during their daily work. It has pioneered the renowned PhysioCare Concept® and thus reduced the strain on hand and arm during pipetting. The Research plus is the pipette family with the lowest weight and lowest operation forces at Eppendorf. Lower operation forces can only be reached with our Eppendorf electronic pipettes. The spring loaded tip cone ensures low tip attachment and ejection forces. The Research plus has the ability to be autoclaved without the need to be disassembled. Fixed-volume pipettes and multichannel options are available; the Research plus pipette will become an indispensable tool in your laboratory.

Applications

- > Pipetting liquids
- > Mixing liquids
- > Filling of plates, gels, and reaction vessels
- > Phase extraction and removal of supernatants

Ordering information						
Volume range	Color code	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	List USD
Eppendorf Research® plus, single-channel, fixed						
10 µL	medium gray	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	\$255.00
20 µL	light gray	±0.8 %	±0.16 µL	±0.3 %	±0.06 µL	255.00
10 µL	yellow	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL	255.00
20 µL	yellow	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL	255.00
25 µL	yellow	±1.0 %	±0.25 µL	±0.3 %	±0.08 µL	255.00
50 µL	yellow	±0.7 %	±0.35 µL	±0.3 %	±0.15 µL	255.00
100 µL	yellow	±0.6 %	±0.6 µL	±0.2 %	±0.2 µL	255.00
200 µL	yellow	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	255.00
200 µL	blue	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL	255.00
250 µL	blue	±0.6 %	±1.5 µL	±0.2 %	±0.5 µL	255.00
500 µL	blue	±0.6 %	±3.0 µL	±0.2 %	±1.0 µL	255.00
1,000 µL	blue	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL	255.00

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



User adjustment: User-friendly option to temporarily adjust the pipetting volume by up to ±2 % to offset inaccuracies when working with difficult liquids (e.g., warm, cold, volatile or high density liquids) or when external conditions change (e.g., altitude or use of elongated tips). Return to factory adjustment without calibration.

Ordering information								
Volume range	Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Research® plus, single-channel, variable, incl. epT.I.P.S.® Box								
0.1–2.5 µL	■ dark gray	0.1 µL	±48.0 %	0.048 µL	±12.0 %	±0.012 µL	3120000011	\$370.00
		0.25 µL	±12.0 %	0.03 µL	±6.0 %	±0.015 µL		
		1.25 µL	±2.5 %	0.031 µL	±1.5 %	±0.019 µL		
		2.5 µL	±1.4 %	0.035 µL	±0.7 %	±0.018 µL		
(0.002 µL)								
0.5–10 µL	■ medium gray	0.5 µL	±8.0 %	±0.04 µL	±5.0 %	±0.025 µL	3120000020	370.00
		1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL		
(0.01 µL)								
2–20 µL	■ light gray	2 µL	±5.0 %	±0.1 µL	±1.5 %	±0.03 µL	3120000097	370.00
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL		
(0.02 µL)								
2–20 µL	■ yellow	2 µL	±5.0 %	±0.1 µL	±1.5 %	±0.03 µL	3120000038	370.00
		10 µL	±1.2 %	±0.12 µL	±0.6 %	±0.06 µL		
		20 µL	±1.0 %	±0.2 µL	±0.3 %	±0.06 µL		
(0.02 µL)								
10–100 µL	■ yellow	10 µL	±3.0 %	±0.3 µL	±1.0 %	±0.1 µL	3120000046	370.00
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
(0.1 µL)								
20–200 µL	■ yellow	20 µL	±2.5 %	±0.5 µL	±0.7 %	±0.14 µL	3120000054	370.00
		100 µL	±1.0 %	±1.0 µL	±0.3 %	±0.3 µL		
		200 µL	±0.6 %	±1.2 µL	±0.2 %	±0.4 µL		
(0.2 µL)								
30–300 µL	■ orange	30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL	3120000100	370.00
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
(0.2 µL)								
100–1,000 µL	■ blue	100 µL	±3.0 %	±3.0 µL	±0.6 %	±0.6 µL	3120000062	370.00
		500 µL	±1.0 %	±5.0 µL	±0.2 %	±1.0 µL		
		1,000 µL	±0.6 %	±6.0 µL	±0.2 %	±2.0 µL		
(1 µL)								
Eppendorf Research® plus, single-channel, variable, incl. epT.I.P.S.® sample bag								
0.5–5 mL	■ violet	0.5 mL	±2.4 %	±0.012 mL	±0.6 %	±0.003 mL	3120000070	370.00
		2.5 mL	±1.2 %	±0.03 mL	±0.25 %	±0.006 mL		
		5 mL	±0.6 %	±0.03 mL	±0.15 %	±0.008 mL		
(5 µL)								
1–10 mL	■ turquoise	1 mL	±3.0 %	±0.03 mL	±0.6 %	±0.006 mL	3120000089	370.00
		5 mL	±0.8 %	±0.04 mL	±0.2 %	±0.01 mL		
		10 mL	±0.6 %	±0.06 mL	±0.15 %	±0.015 mL		
(10 µL)								

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



Eppendorf Research® plus

Ordering information								
Volume range	Color code	Volume	Rel. sys-tematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Research® plus, 8-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	3122000019	\$ 877.00
		1 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL		
		5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL		
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
(0.01 µL)								
10–100 µL	 yellow	10 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	3122000035	877.00
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL		
(0.1 µL)								
30–300 µL	 orange	30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	3122000051	877.00
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		
(0.2 µL)								
Eppendorf Research® plus, 12-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±12.0 %	±0.06 µL	±8.0 %	±0.04 µL	3122000027	1,015.00
		1 µL	±8.0 %	±0.08 µL	±5.0 %	±0.05 µL		
		5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL		
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
(0.01 µL)								
10–100 µL	 yellow	10 µL	±3.0 %	±0.3 µL	±2.0 %	±0.2 µL	3122000043	1,015.00
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.3 %	±0.3 µL		
(0.1 µL)								
30–300 µL	 orange	30 µL	±3.0 %	±0.9 µL	±1.0 %	±0.3 µL	3122000060	1,015.00
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.3 %	±0.9 µL		
(0.2 µL)								

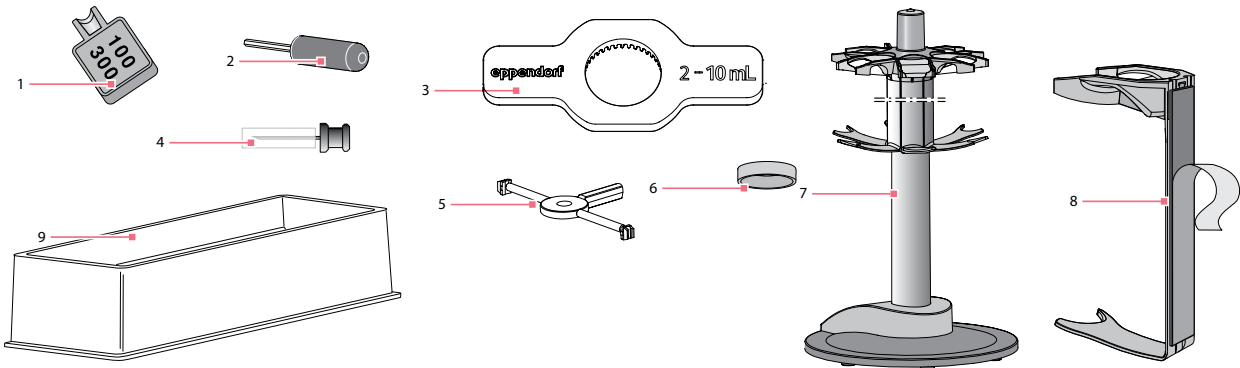
¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



Description
Get ready for a threefold enjoyable pipetting experience with one of the most advanced and ergonomic pipettes in the world. The economic Research plus pick-a-packs are available in three different versions. In addition to the Research plus pipettes, each pack contains one Eppendorf ballpoint pens.

Ordering information		
Description	Catalog No.	List USD
3-pack includes 3 single-channel, adjustable-volume pipettes and 1 full box of Eppendorf epT.I.P.S.® for each pipette ¹⁾		
Volumes: 0.5–10, 10–100 and 100–1,000 µL (Option 1)	3120000909	\$885.00
Volumes: 2–20 ²⁾ , 20–200 and 100–1,000 µL (Option 2)	3120000917	885.00
Volumes: 100–1,000 µL, 0.5–5 mL and 1–10 mL (Option 3)	3120000925	885.00
4-pack includes 4 single-channel, adjustable-volume pipettes, 1 full box of Eppendorf epT.I.P.S. for each pipette		
Volumes: 0.1–2.5, 0.5–10, 10–100 and 100–1,000 µL	022575441	1,215.00
Volumes: 0.1–2.5, 2–20 ²⁾ , 20–200 and 100–1,000 µL	022575442	1,215.00
Volumes: 0.5–10, 2–20 ²⁾ , 20–200 and 100–1,000 µL	022575443	1,215.00
6-pack includes 6 single-channel, adjustable-volume pipettes, 1 full box of Eppendorf epT.I.P.S. for each pipette ¹⁾ and 1 carousel stand ³⁾		
Volumes: 0.1–2.5, 0.5–10, 2–20, 10–100, 20–200 and 100–1,000 µL	022575296	1,850.00
Volumes: 0.5–10, 10–100, 30–300, 100–1,000 µL, 0.5–5 mL and 1–10 mL	022575299	1,850.00

¹⁾ Excludes 5 mL and 10 mL pipettes. ²⁾ The 2 -20 µL pipette included has the yellow operating button. ³⁾ Carousel stand included in delivery package.



1. Cutting tool

2. Adjustment tool

3. Key for detachment

4. Pin

5. Safety plug tool
6. Locking ring

7. Pipette carousel

8. Holder or wall mount

9. Reagent reservoir Tip-Tub

Accessories		
Description	Catalog No.	List USD
Pipette carousel, with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	022444905	152.00
Holder, for Eppendorf Research® plus and Biomaster® 4830, for pipette carousel	3115600019	19.88
Wall mount, for Eppendorf Research® plus and Biomaster® 4830, with hook and loop strip	022444913	34.00
Eppendorf Research® plus red adjustment seal ADJ, 1 set = 5 pieces	3120636005	7.60
Adjustment tool, for changing factory or secondary user adjustment	3120633006	11.30
Safety plug tools, 5 pieces	3120639004	18.50
Eppendorf Research® plus protection filter, for tip cone, 5 mL, color code violet, 1 set = 50 pieces	3120632000	33.70
Eppendorf Research® plus protection filter, for tip cone, 10 mL, color code: turquoise, 1 set = 50 pieces	3111606004	39.06
O-ring for tip cones, 24 pcs., red, for 100 and 300 µL multi-channel pipettes, with mounting aid (1 set = 24 pieces)	3122611000	29.00
Cutting tool, for O-rings of 100 and 300 µL multi-channel pipettes	3122610003	11.30
Key for detachment of 2–10 mL pipettes lower parts	3120634002	11.30
Locking ring, to prevent spring action of 2.5 µL to 1,000 µL single channel pipettes tip cones	3120635009	6.50
Tip-Tub reagent reservoir 70 mL, autoclavable reservoir for aspirating liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	022265806	45.90
Pipette grease with lint-free applicator	0013022153	25.20
Eppendorf TrackIT, RFID Reader and Software	3903000014	625.00

i For more information go to www.eppendorf.com/Researchplus

➤ Pipette service and maintenance contracts can be found on page 86. Pipette tips can be found on page 42 onward.



Eppendorf Xplorer®



- 1. Flexible charging options:** Ability to recharge on a charging stand or by connecting the power cord directly to the unit.
- 2. Selection dial:** Indicates the current operating mode at a glance and makes programming much easier.
- 3. Intuitive user interface:** All pipetting parameters visible at a glance—no scrolling necessary. The back lit color display together with the large font and the on-screen “next-step” guidance improve ease of use even when working inside a hood.
- 4. Speed adjustment:** Possibility to adjust aspiration and dispensing speed to match the viscosity of your liquid and the size of your vessel to prevent air bubbles and splashing
- 5. History function:** Option to automatically recall the last 10 parameter settings (for each of the operating modes) to increase operating speed and convenience
- 6. Multifunctional rocker:** Follows the “up is up and down is down” principle for intuitive pipetting and parameter adjustment.
- 7. Ergonomic display angle:** Optimized angle allows visibility of the parameters during operation as well as programming the unit without moving your wrist for more ergonomic operation
- 8. Patented tip ejection control:** Automatically returns the piston to start position after tip ejection to have the pipette ready for the next aspiration step. Especially helpful if tips are discarded after aspiration.
- 9. Ergonomic low weight:** Low weight (155 g/233 g for single-/8-channel 100 µL pipette) and optimized weight balancing promotes ergonomic operation and prevention of repetitive stress disorders.
- 10. Spring loaded tip cone:** Improves ergonomics by lowering tip attachment forces and reproducibility by ensuring consistent tip attachment

i For more information go to www.eppendorf.com/Xplorer



Description
The Eppendorf Xplorer pipettes are electronic single, 8 and 12 channel pipettes designed to aspirate and dispense liquid volumes from 0.5 µL to 10 mL while eliminating many of potential error risks associated with manual pipetting. The intuitive operating concept and ergonomic design, supported by Eppendorf PhysioCare Concept® set new standards in simplicity, precision and reproducibility. It can be set to 9 different languages: Chinese, Dutch, English, French, German, Italian, Japanese, Portuguese and Spanish. The Xplorer pipettes are the ideal instrument if you need precisely adjustable parameters, reproducible and accurate results while experiencing fatigue-free pipetting and always maintaining full control over pipetting procedures.

- Xplorer and Xplorer plus**
- Applications**
- > Pipetting liquids (manual and automatic)
 - > Pipetting and mixing
 - > Dispensing (timed and manual)
 - > Volume determination (manual pipetting)
 - > Filling of plates, gels, and reaction vessels
 - > Phase extraction and removal of supernatants

Modes of operation	Xplorer	Xplorer plus
Pipetting (Pip): Aspiration and Dispensing of liquids followed by an optional blow out step	■	■
Manual Pipetting (Man): Aspiration of liquid can be manually stopped prior to reaching the max set volume; used for volume determination	■	■
Pipetting and Mixing (P/M): Samples are aspirated and dispensed automatically followed by an adjustable number of mixing cycles	■	■
Dispensing (Dis): Dispensing of liquid in equal partial volumes	■	■
Automatic Dispensing (Ads): Automatic dispensing of liquid in equal partial volumes at user defined time intervals	■	■
Special mode (Spc)—Multi Aspiration: Consecutive aspiration for pooling into one pipette tip		■
Special mode (Spc)—Sequential Dispensing: Aspiration of liquid followed by dispensing it in up to 10 user-defined volume steps		■
Special mode (Spc)—Reverse Pipetting: Over-aspiration of liquid followed by a regular dispensing step. Ideal for non-aqueous solutions		■
Special mode (Spc)—Diluting: Aspiration of a diluent and a sample separated by an air bubble		■
Special mode (Spc)—Sequential pipetting: Pipetting of up to 10 user-defined volumes in sequential order		■
Fix Volume (Fix): Save up to 10 of your most frequently used volumes including aspiration and dispense speed for ease of operation		■
Programming (Prg): Save up to 10 of your most common methods with up to 4 different pipetting steps each		■
Options (Opt): Save favorite settings, set service intervals, activate key lock and more	■	■



Eppendorf Xplorer®



Ordering information								
Volume range	Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Xplorer®, single-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±6.0 %	±0.03 µL	±3.0 %	±0.015 µL	4861000015	\$777.00
		1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL		
(0.01 µL)								
5–100 µL	 yellow	5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL	4861000023	777.00
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
(0.1 µL)								
15–300 µL	 orange	15 µL	±5.0 %	±0.75 µL	±1.4 %	±0.21 µL	4861000031	777.00
		30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL		
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
(0.2 µL)								
50–1,000 µL	 blue	50 µL	±6.0 %	±3 µL	±1.0 %	±0.5 µL	4861000040	777.00
		100 µL	±3.0 %	±3 µL	±0.6 %	±0.6 µL		
		500 µL	±1.0 %	±5 µL	±0.2 %	±1 µL		
		1,000 µL	±0.6 %	±6 µL	±0.2 %	±2 µL		
(1 µL)								
0.2–5 mL	 violet	250 µL	±4.8 %	±12 µL	±1.2 %	±3 µL	4861000058	777.00
		500 µL	±3.0 %	±15 µL	±0.6 %	±3 µL		
		2,500 µL	±1.2 %	±30 µL	±0.3 %	±6.25 µL		
		5,000 µL	±0.6 %	±30 µL	±0.15 %	±7.5 µL		
(5 µL)								
0.5–10 mL	 turquoise	500 µL	±6.0 %	±30 µL	±1.2 %	±6 µL	4861000066	777.00
		1,000 µL	±3.0 %	±30 µL	±0.6 %	±6 µL		
		5,000 µL	±0.8 %	±40 µL	±0.2 %	±10 µL		
		10,000 µL	±0.6 %	±60 µL	±0.15 %	±15 µL		
(10 µL)								

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to www.eppendorf.com/Xplorer



Ordering information								
Volume range	Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Xplorer®, 8-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861000104	\$1,320.00
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
(0.01 µL)								
5–100 µL	 yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861000120	1,320.00
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
(0.1 µL)								
15–300 µL	 orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861000147	1,320.00
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
(0.2 µL)								
50–1,200 µL	 green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861000163	1,320.00
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.4 µL	±0.3 %	±3.6 µL		
(1 µL)								
Eppendorf Xplorer®, 12-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861000112	1,630.00
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
(0.01 µL)								
5–100 µL	 yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861000139	1,630.00
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
(0.1 µL)								
15–300 µL	 orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861000155	1,630.00
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
(0.2 µL)								
50–1,200 µL	 green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861000171	1,630.00
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.2 µL	±0.3 %	±3.6 µL		
(1 µL)								

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.



Eppendorf Xplorer® plus



Description

The Eppendorf Xplorer plus offers all Eppendorf Xplorer functions including the intuitive operating concept but provides an array of unique features that make everyday routines faster and easier:

- 1. Special pipetting modes (Spc):** Include multi aspiration, diluting, sequential dispensing, sequential pipetting, and reverse pipetting
- 2. Programming (Prg) and editing (Edit):** Up to 10 of your most common methods with up to 4 different pipetting steps each
- 3. Fix Volume (Fix):** Save up to 10 of your most frequently used volumes including aspiration and dispense speed for ease of operation
- 4. Password security:** To protect programs and adjustment settings
- 5. Service reminders:** Possibility for service reminders based on time intervals or number of pipetting cycles



Description

The Eppendorf Xplorer plus was developed to exceed the high standards of Eppendorf Xplorer. This expanded version offers exciting extras such as intelligent applications, adjustable fixed volumes, individual programming and a history function to make work much easier and faster. The Eppendorf Xplorer plus is the perfect choice for all users who need advanced speed, safety and reliability every day.

Applications

- > Pipetting liquids (manual and automatic)
- > Dispensing (timed and manual)
- > Pipetting and mixing
- > Diluting
- > Pooling supernatants from different vessels (multi aspiration)
- > Sequential dispensing and pipetting
- > Reverse pipetting
- > Volume determination (manual pipetting)
- > Filling of plates, gels, and reaction vessels
- > Phase extraction and removal of supernatants

Ordering information

Volume range	Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Xplorer® plus, single-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±6.0 %	±0.03 µL	±3.0 %	±0.015 µL	4861000708	\$969.00
		1 µL	±2.5 %	±0.025 µL	±1.8 %	±0.018 µL		
		5 µL	±1.5 %	±0.075 µL	±0.8 %	±0.04 µL		
		10 µL	±1.0 %	±0.1 µL	±0.4 %	±0.04 µL		
(0.01 µL)								
5–100 µL	 yellow	5 µL	±4.0 %	±0.2 µL	±2.0 %	±0.1 µL	4861000716	969.00
		10 µL	±2.0 %	±0.2 µL	±1.0 %	±0.1 µL		
		50 µL	±1.0 %	±0.5 µL	±0.3 %	±0.15 µL		
		100 µL	±0.8 %	±0.8 µL	±0.2 %	±0.2 µL		
(0.1 µL)								
15–300 µL	 orange	15 µL	±5.0 %	±0.75 µL	±1.4 %	±0.21 µL	4861000724	969.00
		30 µL	±2.5 %	±0.75 µL	±0.7 %	±0.21 µL		
		150 µL	±1.0 %	±1.5 µL	±0.3 %	±0.45 µL		
		300 µL	±0.6 %	±1.8 µL	±0.2 %	±0.6 µL		
(0.2 µL)								
50–1,000 µL	 blue	50 µL	±6.0 %	±3 µL	±1.0 %	±0.5 µL	4861000732	969.00
		100 µL	±3.0 %	±3 µL	±0.6 %	±0.6 µL		
		500 µL	±1.0 %	±5 µL	±0.2 %	±1 µL		
		1,000 µL	±0.6 %	±6 µL	±0.2 %	±2 µL		
(1 µL)								
0.2–5 mL	 violet	200 µL	±4.8 %	±12 µL	±1.2 %	±3 µL	4861000740	969.00
		500 µL	±3.0 %	±15 µL	±0.6 %	±3 µL		
		2,500 µL	±1.2 %	±30 µL	±0.3 %	±6.25 µL		
		5,000 µL	±0.6 %	±30 µL	±0.15 %	±7.5 µL		
(5 µL)								
0.5–10 mL	 turquoise	500 µL	±6.0 %	±30 µL	±1.2 %	±6 µL	4861000759	969.00
		1,000 µL	±3.0 %	±30 µL	±0.6 %	±6 µL		
		5,000 µL	±0.8 %	±40 µL	±0.2 %	±10 µL		
		10,000 µL	±0.6 %	±60 µL	±0.15 %	±15 µL		
(10 µL)								

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to www.eppendorf.com/Xplorerplus





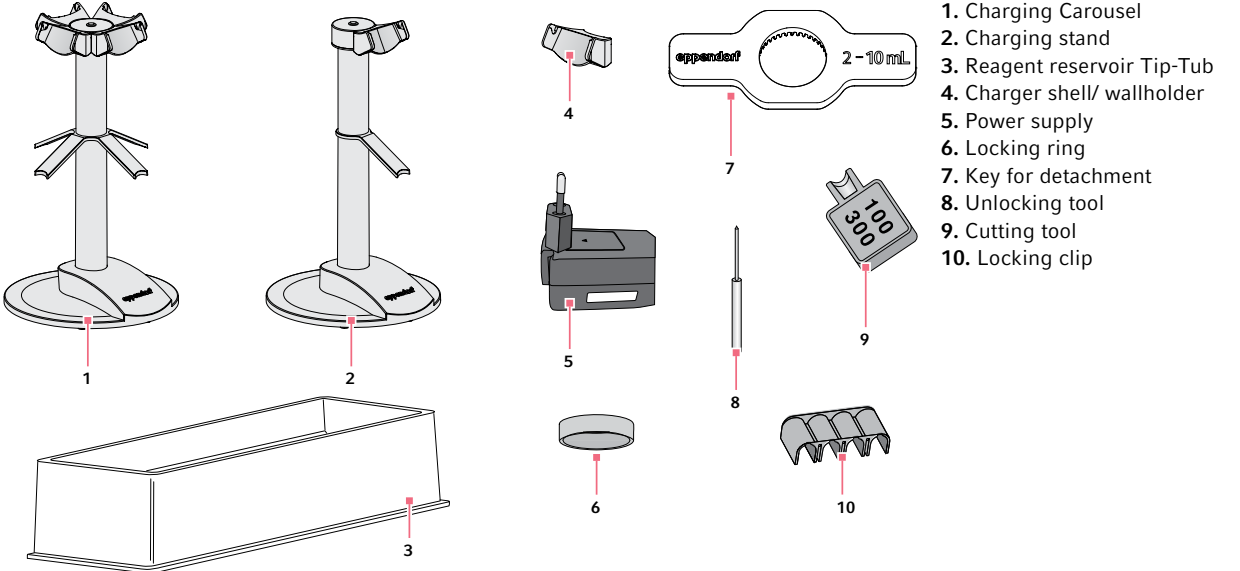
Eppendorf Xplorer® plus



Ordering information								
Volume range	Color code	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
(Increments)								
Eppendorf Xplorer® plus, 8-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861000767	\$1,659.00
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
(0.01 µL)								
5–100 µL	 yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861000783	1,659.00
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
(0.1 µL)								
15–300 µL	 orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861000805	1,659.00
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
(0.2 µL)								
50–1,200 µL	 green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861000821	1,659.00
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.4 µL	±0.3 %	±3.6 µL		
(1 µL)								
Eppendorf Xplorer® plus, 12-channel, variable								
0.5–10 µL	 medium gray	0.5 µL	±10.0 %	±0.05 µL	±6.0 %	±0.03 µL	4861000775	2,045.00
		1 µL	±5.0 %	±0.05 µL	±3.0 %	±0.03 µL		
		5 µL	±3.0 %	±0.15 µL	±1.5 %	±0.075 µL		
		10 µL	±2.0 %	±0.2 µL	±0.8 %	±0.08 µL		
(0.01 µL)								
5–100 µL	 yellow	5 µL	±6.0 %	±0.3 µL	±4.0 %	±0.2 µL	4861000791	2,045.00
		10 µL	±2.0 %	±0.2 µL	±2.0 %	±0.2 µL		
		50 µL	±1.0 %	±0.5 µL	±0.8 %	±0.4 µL		
		100 µL	±0.8 %	±0.8 µL	±0.25 %	±0.25 µL		
(0.1 µL)								
15–300 µL	 orange	15 µL	±6.0 %	±0.9 µL	±2.0 %	±0.3 µL	4861000813	2,045.00
		30 µL	±2.5 %	±0.75 µL	±1.0 %	±0.3 µL		
		150 µL	±1.0 %	±1.5 µL	±0.5 %	±0.75 µL		
		300 µL	±0.6 %	±1.8 µL	±0.25 %	±0.75 µL		
(0.2 µL)								
50–1,200 µL	 green	50 µL	±8.0 %	±4.0 µL	±1.2 %	±0.6 µL	4861000830	2,045.00
		120 µL	±6.0 %	±7.2 µL	±0.9 %	±1.08 µL		
		600 µL	±2.7 %	±16.2 µL	±0.4 %	±2.4 µL		
		1,200 µL	±1.2 %	±14.2 µL	±0.3 %	±3.6 µL		
(1 µL)								

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to www.eppendorf.com/Xplorerplus



Accessories		
Description	Catalog No.	List USD
Charger carousel, for 4 Eppendorf Xplorer® and Eppendorf Xplorer® plus	4880000026	\$782.00
Charger stand, for 1 Eppendorf Xplorer® and Eppendorf Xplorer® plus	4880000000	260.00
Charger shell, for Eppendorf Xplorer®, for charging carousel and stand	4880602000	62.00
Wall mount, for Eppendorf Xplorer®	4861615001	34.00
Spare charging cable, 100-240 VAC/5 VDC (c), with power plug adapters for Eppendorf Xplorer®, electronic Repeater® and use with charger stand	4986603005	33.70
Spare charging cable, incl. power plug adapters for charger carousel for Eppendorf Xplorer® and electronic Repeater®	4880603006	57.50
Eppendorf protection filter 5 mL, 10 filters with 1 filter sleeve, for 0.5-5 mL variable, color code violet	3120632000	33.70
Eppendorf protection filter 10 mL, 10 filters with 1 filter sleeve, for 1-10 mL variable, color code turquoise	3111606004	39.06
Cutting tool, for O-rings of 100 and 300 µL multi-channel pipettes	3122610003	11.30
Cutting tool, for O-rings of 1,200 µL multi-channel pipettes	4860736000	21.00
O-ring for tip cones, 24 pcs., red, for 100 and 300 µL multi-channel pipettes, with mounting aid (1 set = 24 pieces)	3122611000	29.00
O-rings for tip cones, 24 pcs., red, for 1,200 µL multi-channel pipettes (1 set = 24 pieces)	4860716009	23.94
Key for detachment of 2–10 mL pipettes lower parts	3120634002	11.30
Unlocking tool, to open 1,200 µL multi-channel manifolds	4861605006	24.50
Locking ring, to prevent spring action of 2.5 µL to 1,000 µL single channel pipettes tip cones	3120635009	6.50
Locking clip for 8-channel pipette, to prevent spring action of tip cones	3122612006	13.50
Locking clip for 12-channel pipette, to prevent spring action of tip cones	3122613002	15.50
Tip-Tub reagent reservoir 70 mL, autoclavable reservoir for aspirating liquids with multi-channel pipettes, 1 set = 10 reservoirs and 10 lids	0030058607	30.52
Pipette grease with lint-free applicator	0013022153	25.20
Eppendorf TrackIT, RFID Reader and Software	3903000014	625.00



Eppendorf Purity Grades for Tips



Eppendorf epT.I.P.S.®, ep Dualfilter T.I.P.S.® and Combitips advanced® stand for highest quality and purity. The high precision and accuracy of pipette tips and Combitips® is guaranteed by precise molding. Each lot of pipette tips and Combitips is subject to gravimetric measurement during final testing. Low wetting ensures reliable volume readings and minimal adhesion. Pipette tips and Combitip cylinders are made of PP (polypropylene). A relatively inert plastic

characterized by low wettability as well as high dimensional and mechanical stability across a wide temperature range. For the Combitips advanced pistons PE (polyethylene) is used. This is due to the fact that ideal running properties between two parts can only be achieved by using two different types of plastic. Our tips are available in a variety of purity grades (see table beside). For further details please read page 492.



Pure quality: Tested lot by lot
With the strictest control criteria, internally and externally monitored, we guarantee the consistently high quality of our products – from lot to lot. Our consumables are available in a variety of purity qualities. Eppendorf Quality™ as well as more advanced purity grades: “Sterile, Protein-free, PCR clean and Eppendorf Biopur®“. In addition to our internal process controls, the sterile, Protein-free, PCR clean and Eppendorf Biopur purity grades are



tested by an external lab lot by lot. This allows us to ensure we consistently meet our customer’s high demands when it comes to purity. As a special service, we make the inspection certificate for each delivered lot available online. (www.eppendorf.com/certificates).

i For more information go to www.eppendorf.com



Purity grades					
Eppendorf purity grades for tips	Eppendorf Quality™	Eppendorf sterile	Eppendorf PCR clean	Eppendorf sterile + PCR clean	Eppendorf Biopur®
Continuous quality control for the following relevant criteria:					
Function, tightness, precision	■	■	■	■	■
Low wetting	■	■	■	■	■
High chemical resistance	■	■	■	■	■
High thermal resistance	■	■	■	■	■
High resistance to centrifugation forces* ¹	■	■	■	■	■
High transparency	■	■	■	■	■
Precisely shaped	■	■	■	■	■
Lot testing*² (certified) for the following purity criteria:					
Pyrogen-free (endotoxin-free)		■		■	■
Sterile (Ph.Eur./USP)		■		■	■
Human DNA-free			■	■	■
DNA-free (Human- + bacteria DNA)					■
DNase-free			■	■	■
RNase-free			■	■	■
PCR-inhibitor-free			■	■	■
ATP-free					■
Eppendorf tips					
epT.I.P.S.® Standard + Box + Set	■				
epT.I.P.S.® Reloads	■		■		
epT.I.P.S.® Racks	■	■* ³	■	■	■
epT.I.P.S.® Singles					■* ³
ep Dualfilter T.I.P.S.®				■	
ep Dualfilter T.I.P.S.® SealMax				■	
ep Dualfilter T.I.P.S.® LoRetention				■	
Combitips advanced®	■	■* ³	■		■* ³
epT.I.P.S.® LoRetention	■		■		
epT.I.P.S.® Motion	■	■			
epT.I.P.S.® Motion filtertips		■	■	■	

*¹ For accurate details regarding resistance to centrifugation, please refer to the respective product pages. *² Lot-specific certificate can be downloaded from www.eppendorf.com/certificates. *³ Only available in North America.



epT.I.P.S.®



Description

For epT.I.P.S. – the original Eppendorf “Totally Integrated Pipetting System” – the tips are optimally coordinated to Eppendorf pipettes and, of course, meet EN ISO 8655 requirements. This has resulted in minimal attachment and ejection forces with the highest level of tightness. epT.I.P.S. pipette tips can be used with pipettes from other manufacturers. Optimal wetting properties, high transparency and special, certified purity grades are the visible expression of our product and production philosophy.

Product features

- > The ergonomically optimized cone geometry provides the optimal pipette fit on the Eppendorf Pipette
- > epT.I.P.S. pipette tips can be used universally, including pipette models from other manufacturers
- > Fine graduations make visual checks of the pipetting volume even easier
- > Long, narrow tips reach the base of narrow and high vessels without touching the top of the vessel edge
- > Fine retracted or extended tips simplify work with small volumes
- > Available in four purity grades: Eppendorf Quality, PCR clean, Eppendorf Biopur®, PCR clean/Sterile (sterile and pyrogen-free)
- > Color-coded trays make volume identification and allocation of Eppendorf pipettes easier than ever

Applications

- > Pipetting liquids
- > Dispensing liquids
- > Mixing liquids
- > Filling plates and reaction vessels
- > Filling gels for electrophoresis
- > Phase extraction and removal of supernatants



i For more information go to www.eppendorf.com/epTips
➤ Ordering information see page 50 onward.



epT.I.P.S.® Standard

- > Original, high-quality Eppendorf pipette tips packaged in resealable bags
- > Available in sizes from 10 µL to 10 mL in Eppendorf Quality purity grade
- > epT.I.P.S. Standard pipette tips can be autoclaved at 121 °C

epT.I.P.S.® Box/ epT.I.P.S.® Set

- > Contamination-free transfer of trays to stable working box
- > System optimized for use with multichannel pipettes
- > Color-coded trays for simple identification of tips and pipette
- > Tips can be attached to pipette from refill trays
- > Boxes and trays are autoclavable
- > epT.I.P.S. Box and epT.I.P.S. Set available in Eppendorf Quality

epT.I.P.S.® Reloads

- > All components are 100 % recyclable
- > Reduced waste as compared with disposable racks
- > The refill trays can be autoclaved, in packaging and without foil, for subsequent use
- > The refill system, depending on tips size, is packaged as either dual-sided or in stack form
- > Available in purity grades of Eppendorf Quality and PCR clean
- > Color-coded trays for simple volume and pipette identification

epT.I.P.S.® Racks

- > Hinged lid can be flipped open with one hand
- > Ideal for when absolute purity is needed. Each rack is individually sealed to guarantee purity extended footprint provides stability during tip attachment
- > Fully autoclavable
- > Each production lot inspected continuously by independent laboratory
- > Lot-specific certificates available for PCR Clean, Sterile and Biopur racks at www.eppendorf.com/certificates
- > Packed in racks with 96, 48 or 24 tips

epT.I.P.S.®



epT.I.P.S.® Singles

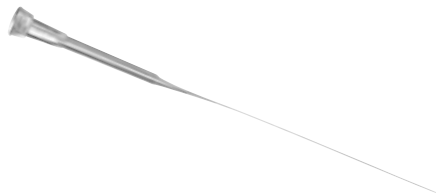
- > Eppendorf Biopur pipette tip, individually wrapped
- > Guaranteed PCR clean, sterile, pyrogen-, ATP- and DNA-free
- > For use in medical, pharmaceutical and food industry, molecular biology and cell technology
- > Batch number and expiration date on each blister package
- > Each production lot inspected continuously by independent laboratory
- > Lot-specific certificates available at www.eppendorf.com/certificates

Special Tips



Eppendorf GELoader®

- > Special tip for gel electrophoresis, loading of polyacrylamide gels
- > Flexible long and narrow tips for handling of smallest volumes
- > GELoader tips are rack autoclavable
- > Highest precision and accuracy when used with Eppendorf 0.5 to 10 µL pipettes (gray control button)



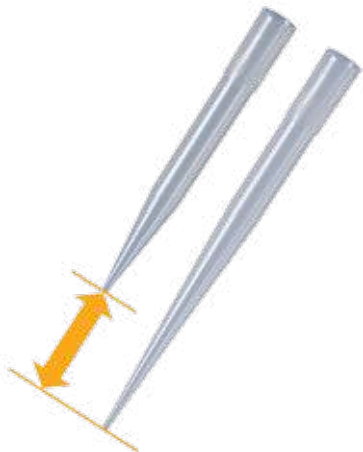
Eppendorf Microloader™

- > Extremely long, fine and flexible tip for filling of microcapillaries for microinjection and where additional reach is needed
- > Microloader tips are rack autoclavable
- > Highest precision and accuracy when used with Eppendorf 0.5 to 10 µL pipettes (gray control button)

i For more information go to www.eppendorf.com/epTips

➤ Ordering information see page 50 onward.

epT.I.P.S.® Long



Description

With the slim design of the extra long epT.I.P.S. and ep Dualfilter T.I.P.S. pipette tips, you always achieve best results when pipetting into Eppendorf 5-mL-tubes, conical tubes, cell culture flasks, deepwell plates and other deep vessels. Furthermore, the risk of touching the walls of these deep vessels is minimized and cross-contamination is virtually eliminated. Extra long epT.I.P.S. are available in the following volumes:

- > 0.5-20 µL L, 46 mm: Ideal for pipetting from 0.2, 0.5, 1.5 and 2 mL tubes as well as plates
- > 50-1,250 µL L, 103 mm: Ideal for pipetting out of 1 mL deepwell plates
- > 0.2 - 5 mL L, 175 mm: Ideal for pipetting out of 25 cm³ cell culture flasks, volumetric flasks and 25 mL graduated cylinders
- > 0.5-10 mL L, 243 mm: Ideal for pipetting out of 75 cm² cell culture flasks, 1 L reagent bottles and Erlenmeyer flask or measuring cylinders

Available in our purity grades Eppendorf Quality™; PCR clean; PCR clean/Sterile (sterile and pyrogen-free); Eppendorf Biopur®.

Applications

- > Pipetting liquids
- > Dispensing liquids
- > Mixing liquids
- > Filling plates and reaction vessels
- > Filling gels for electrophoresis
- > Phase extraction and removal of supernatants

Product features

- > Slim design of the extra long epT.I.P.S. and ep Dualfilter T.I.P.S. pipette tips eliminates the risk of touching the walls of deep vessels, thus cross-contamination is virtually eliminated
- > Always obtain best results when pipetting from and into Eppendorf 5-mL-tubes, conical tubes, cell culture flasks, deep wells and other deep vessels
- > Available in Eppendorf Quality, PCR clean, PCR clean/Sterile (sterile and pyrogen-free), and Eppendorf Biopur purity grades



ep Dualfilter T.I.P.S.®



Description

ep Dualfilter T.I.P.S. filter tips are the first filter tips with a two-phase filter for contamination protection. The two filter layers made of flexible, hydrophobic material, fit perfectly in the tip cone and retain practically 100 % of all aerosols*1 and biomolecules. This unique filtering effect is achieved using various, well-defined pore sizes. The layer facing the sample provides protection from drops, splashes and aerosols. The layer facing the pipette cone functions as a second barrier from contamination, and dependably binds biomolecules. A defined air passage rate guarantees full sample recovery and the customary quick pipetting.

*1 An aerosol is a colloid of fine solid particles or liquid droplets, in air or another gas.

Product features

- > Two filter layers provide dual protection
- > Dual protection against aerosols*1 and biomolecules
- > Dual protection for pipette and sample
- > Free of PCR inhibitor additives
- > Available in Eppendorf PCR clean/Sterile (sterile and pyrogen-free)
- > Tested at the Fraunhofer Institute for Toxicology and Experimental Medicine (ITEM) in Hannover, Germany
- > Continuous inspection of each production lot by an independent laboratory
- > Lot-specific certificates are available at: www.eppendorf.com/certificates
- > Certificate of filter efficiency acc. to EN 1822 available at: www.eppendorf.com/certificates

Applications

- > DNA applications (e.g. PCR)
- > RNA applications (e.g. Gene expression analysis)
- > Protein applications (e.g. Antibody Research)
- > Cell Culture applications (e.g. Media)
- > Applications involving the use of radioactive isotopes
- > All applications which use aerosol*1 binding liquids

i For more information go to www.eppendorf.com/epTips
➤ Ordering information see page 50 onward.



ep Dualfilter T.I.P.S.® SealMax



Description

The new violet and white filter for the ep Dualfilter T.I.P.S.® SealMax filter tips combine a reliable contamination protection for your pipette from your sample liquid with virtually 100 % protection from aerosols*1 and biomolecules. This new Dualfilter closes immediately when it comes into contact with the overpipetted sample without inhibiting valuable material. Additionally drops and splashes are retained by the white layer, the violet layer forms the highly-effective barrier against sample liquid. Further information and certification on specific sample recovery features, PCR inhibition and aerosol protection are available on your local Eppendorf website.

*1 An aerosol is a colloid of fine solid particles or liquid droplets in air or another gas.

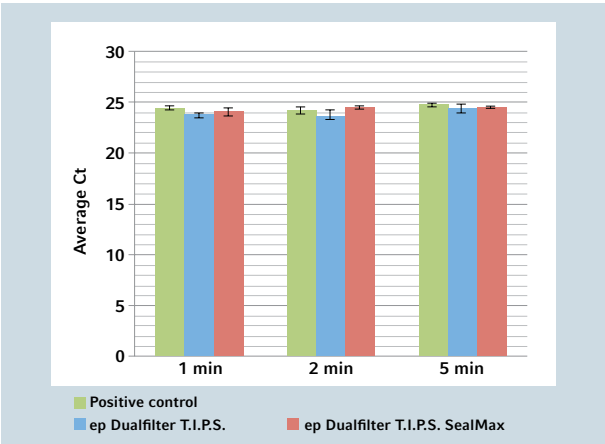
Product features

- > Reliable protection from liquids, aerosols, and biomolecules
- > No PCR inhibiting additives
- > Protection of your pipette from aggressive liquids when over-aspiration occurs
- > Available in PCR clean / Sterile (sterile and pyrogen-free)
- > Continuous inspection of each production lot by an independent laboratory guarantees high purity and quality
- > Lot specific purity certificates available at: www.eppendorf.com/certificates
- > Certificate of filter efficiency acc. to EN 1822 available at: www.eppendorf.com/certificates

Applications

- > DNA applications (e.g. PCR)
- > RNA applications (e.g. Gene expression analysis)
- > Protein applications (e.g. Antibody Research)
- > Cell Culture applications (e.g. Media)
- > Applications involving the use of radioactive isotopes
- > All applications which use aerosol*1 binding liquids

Fig. 1: Average Ct values of test filter tips (5 replicates of each) and positive control (3 replicates). The error bar represents standard deviation. 1 min, 2 min and 5 min refers to the contact time of the sample water with the filter materials of the test filter tips by over-pipetting, while positive control did not involve any contact with the filter materials.





epT.I.P.S.® LoRetention



The “Pearl Effect” – a comparison of the amount of residual liquid when pipetting solutions that contain detergents:
1. Significant loss of sample using standard tips
2. Maximum recovery with epT.I.P.S. LoRetention

Description

The ultrahydrophobic, extremely homogeneous surface of the epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention pipette tips is achieved through an innovative treatment at the molecular level – the Pearl Effect Technology. They are uncoated, free of additives and do not leach into the sample. Liquids containing detergents fully roll off, so that almost no liquid remains in the tip. In comparison, the adhering liquid film in standard tips leaves behind a significantly higher amount of sample material. These outstanding material properties guarantee maximum sample recovery, improved reproducibility and increased sensitivity.

Product features

- > LoRetention polypropylene maximizes reproducibility when working with detergent-containing liquids, e.g. for sensitive PCR and qPCR applications
- > Ultrahydrophobic surface for minimal sample loss
- > Significantly reduced foam formation during pipetting
- > Extreme resistance to chemicals
- > Available in PCR clean and Eppendorf Quality
- > Also available as ep Dualfilter T.I.P.S. in PCR clean/Sterile (sterile and pyrogen-free)
- > No coating, free of additives and do not leach into the sample
- > Lot-specific certificates are available at: www.eppendorf.com/certificates

Applications

- > Cell culture (media)
- > Genomics: PCR, RT-PCR, qPCR and all other types of PCR
- > Enzymatic reactions (restriction digestion, ligation)
- > Isolation and purification of nucleic acid
- > Gel electrophoresis (e.g., prefabricated DNA ladders) typical detergents: SDS, Triton®, X-100, Brij® 35, Tween® 20, CHAPS®
- > Proteomics (all types of protein examinations)
- > Protein isolation and purification

Maximum reproducibility with epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention

In particular with sensitive PCR and real-time PCR applications low-retention surfaces can increase reproducibility and notably reduce the loss of expensive reagents - depending on the reagent solution, this can be by up to 5 %!

Versatile application

- epT.I.P.S. LoRetention pipette tips are ideally suited for all applications with samples that contain detergents:
- > PCR and real-time PCR preparation of enzyme solutions and master mixes
 - > Isolation, purification and denaturation of proteins
 - > Restriction digestions and ligations
 - > Pipetting DNA ladders during gel electrophoresis

epT.I.P.S. LoRetention and ep Dualfilter T.I.P.S. LoRetention perform considerably better in terms of precision and sample recovery than low retention tips from other manufacturers. In our Application Notes 218 and 192 you find detailed results on the comparison of residual liquid from epT.I.P.S. LoRetention with standard epT.I.P.S. pipette tips. Also shown are low retention tips of other manufacturers and the comparison of resistance of the low retention property when subjected to solvents or autoclaving. Both results showed best performance of epT.I.P.S. LoRetention with lowest residual liquid and smallest standard deviation.

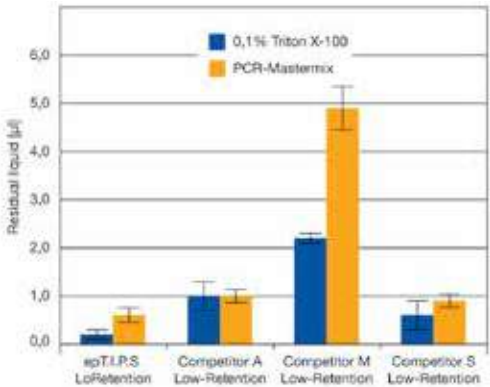


Fig. 1. Comparison of residual liquid from epT.I.P.S. LoRetention and low retention tips of other manufacturers. 200 µL tips were used to pipette a commercial PCR master mix and the detergent 0.1 % Triton X-100. Once the liquid had been dispensed, the residual liquid in the tips was determined. The measurements were repeated several times and the standard deviation determined. epT.I.P.S. LoRetention resulted in the lowest residual liquid, as well as the smallest standard deviation.

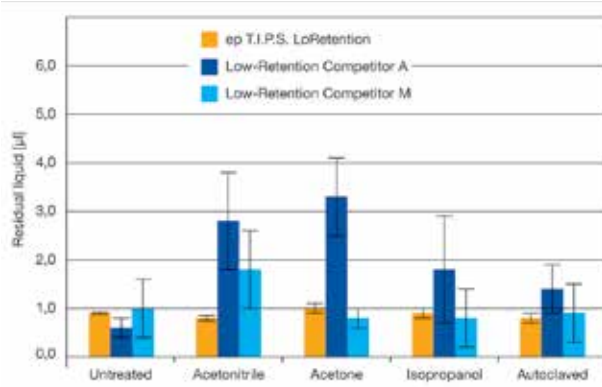


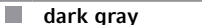
Fig. 2. Comparison of resistance of the low retention property when subjected to solvents or autoclaving. 200 µL epT.I.P.S. LoRetention and low retention tips of other manufacturers were autoclaved or treated with the solvent specified. An enzymatic buffer containing detergents was then pipetted and the residual moisture was determined. epT.I.P.S. LoRetention resulted in reproducible low levels of residual liquid with minimum standard deviation. Low retention tips from other manufacturers are less resistant to chemicals or autoclaving; this resulted in an increase in residual liquid and standard deviation.

i For more information go to www.eppendorf.com/epTips
➤ Ordering information see page 50 onward.





Liquid Handling

Volume range/epT.I.P.S.® epT.I.P.S.® LoRetention (all tips shown are actual size)	 Standard/Bulk		 Reloads		 Reloads		
	Eppendorf Quality™		Eppendorf Quality™		PCR clean		
 dark gray	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	0.1 – 10 µL S, 34 mm	022492004	\$70.60	022491504	\$86.70	022491709	\$100.00
				022493018	\$95.90	022493010	\$110.16
				LoRetention		LoRetention	
 medium gray	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	0.1 – 20 µL, 40 mm	022492012	\$70.60	022491512	\$86.70	022491717	\$100.00
 light gray	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	0.5 – 20 µL L, 46 mm	022492021	\$70.60	022491521	\$86.70	022491725	\$100.00
				022493020	\$95.90	022493012	\$110.16
				LoRetention		LoRetention	
 yellow	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	2 – 200 µL, 53 mm	022492039	\$56.20	022491539	\$66.30	022491733	\$79.60
				022493022	\$76.50	022493014	\$89.80
				LoRetention		LoRetention	
 orange	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	20 – 300 µL, 55 mm	022492047	\$56.20	022491547	\$66.30	022491741	\$81.60
 blue	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	50 – 1,000 µL, 71 mm	022492055	\$61.40	022491555	\$74.46	022491750	\$86.70
				022493024	\$87.70	022493016	\$95.90
				LoRetention		LoRetention	
 green	1,000 tips (2 bags x 500 tips)		960 tips (10 trays x 96 tips)		960 tips (10 trays x 96 tips)		
	50 – 1,250 µL, 76 mm	022492063	\$61.40	022491563	\$74.50	022491768	\$86.70

¹⁾ Eppendorf Quality. ²⁾ PCR Clean Quality. ³⁾ Sterile Quality. ⁴⁾ Biopur Quality. ⁵⁾ 480 tips (5 racks x 96 tips).

i For more information go to www.eppendorf.com/epTips

Product appearance, specifications, and/or prices are subject to change without notice.

Liquid Handling

 Box	 Set	 Singles	    Racks
Eppendorf Quality™	Eppendorf Quality™	Eppendorf Biopur®	
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box		
022491300 \$39.90	022491407 \$69.50 0030072251 \$77.50 LoRetention		022491903 ¹ \$109.50 022491806 ² \$129.60
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box	100 tips, individually packed	480 tips (5 racks x 96 tips)
022491318 \$39.90	022491415 \$69.50	022491130 \$33.70	022491911 ¹ \$109.50 022491814 ² \$129.60 022492250 ³ \$124.40 022491067 ^{4,5} \$101.00
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box		
022491326 \$39.90	022491423 \$69.50 0030072260 \$77.50 LoRetention		022491920 ¹ \$109.50 022491822 ² \$129.60
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box	100 tips, individually packed	480 tips (5 racks x 96 tips)
022491334 \$39.90	022491431 \$57.30 0030072278 \$64.30 LoRetention	022491148 \$27.50	022491938 ¹ \$85.00 022491831 ² \$102.00 022492276 ³ \$97.90 022491083 ^{4,5} \$92.80
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box		480 tips (5 racks x 96 tips)
022491342 \$39.90	022491440 \$57.30		022491946 ¹ \$87.20 022491849 ² \$102.00 022492284 ³ \$97.90 022491091 ^{4,5} \$94.90
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box	100 tips, individually packed	480 tips (5 racks x 96 tips)
022491351 \$39.90	022491458 \$57.30 0030072286 \$69.40 LoRetention	022491156 \$28.50	022491954 ¹ \$92.30 022491857 ² \$110.60 022492292 ³ \$107.10 022491105 ^{4,5} \$99.90
1 reusable box x 96 tips	480 tips (5 trays x 96 tips), 1 reusable box		480 tips (5 racks x 96 tips)
022491369 \$39.90	022491466 \$60.30		022491962 ¹ \$92.30 022491865 ² \$113.60 022492306 ³ \$107.10 022491113 ^{4,5} \$99.90





Liquid Handling

Volume range/epT.I.P.S.®
epT.I.P.S.® LoRetention
(all tips shown are actual size)

■ dark green

50 – 1,250 µL L, 103 mm

Standard/Bulk

Eppendorf Quality™

1,000 tips (2 bags x 500 tips)

022494018

\$62.40

Reloads

Eppendorf Quality™

960 tips (10 trays x 96 tips)

022494004

\$77.50

Reloads

PCR clean

960 tips (10 trays x 96 tips)

022494006

\$89.80



■ red

0.25 – 2.5 mL, 115 mm

500 tips (5 bags x 100 tips)

022492071

\$70.60

480 tips (10 trays x 48 tips)

022491571

\$74.50

480 tips (10 trays x 48 tips)

022491776

\$86.70



■ violet

0.1 – 5 mL, 120 mm

500 tips (5 bags x 100 tips)

022492080

\$98.20



■ violet

0.2 – 5 mL L, 175 mm

300 tips (3 bags x 100 tips)

0030000650

Inquire



■ turquoise

0.5 – 10 mL, 165 mm

200 tips (2 bags x 100 tips)

022492098

\$54.20



■ turquoise

0.5 – 10 mL L, 243 mm

200 tips (2 bags x 100 tips)

022492101

\$61.40



(Image reduced size)

¹⁾ Eppendorf Quality. ²⁾ PCR Clean Quality. ³⁾ Sterile Quality. ⁴⁾ Biopur Quality. ⁵⁾ 480 tips (5 racks x 96 tips).

i For more information go to www.eppendorf.com/epTips

Product appearance, specifications, and/or prices are subject to change without notice.



Liquid Handling

Box

Eppendorf Quality™

1 reusable box x 96 tips

022494016

\$39.90



Set

Eppendorf Quality™

240 tips (5 trays x 48 tips),
1 reusable box

022491474

\$69.60



Singles

Eppendorf Biopur®



Racks

480 tips (5 racks x 96 tips)

022494012²

\$56.60



1 reusable box x 48 tips

022491377

\$39.90

240 tips (5 racks x 48 tips)

022491971¹

\$50.00

022491873²

\$56.40

022491121⁴

\$99.90

1 reusable box x 24 tips

022491385

\$39.90

120 tips (5 racks x 24 tips)

022491989¹

\$55.30

022491881²

\$65.90

022492314³

\$107.10

0030075137⁴

\$76.50

120 tips (5 racks x 24 tips)

0030075188⁴

Inquire

120 tips (5 racks x 24 tips)

022491997¹

\$79.70

022491164⁴

\$85.70



Liquid Handling

Volume range/ ep Dualfilter T.I.P.S.®/ ep Dualfilter T.I.P.S.® LoRetention/ ep Dualfilter T.I.P.S.® SealMax	Racks		PCR clean/Sterile (sterile and pyrogen-free)		 	
 dark gray	960 tips (10 racks x 96 tips)					
0.1 – 10 µL S, 34 mm	022491202	\$161.50	022493000 LoRetention	\$177.50	0030077806 SealMax	\$169.70
	960 tips (10 racks x 96 tips)					
 medium gray	960 tips (10 racks x 96 tips)					
0.1 – 10 µL M, 40 mm	022491211	\$161.50				
	960 tips (10 racks x 96 tips)					
 light gray	960 tips (10 racks x 96 tips)					
0.5 – 20 µL L, 46 mm	022491229	\$161.50	022493002 LoRetention	\$177.50	0030077814 SealMax	\$169.70
	960 tips (10 racks x 96 tips)					
 yellow	960 tips (10 racks x 96 tips)					
2 – 20 µL, 53 mm	022491270	\$161.50				
	960 tips (10 racks x 96 tips)					
 yellow	960 tips (10 racks x 96 tips)					
2 – 100 µL, 53 mm	022491237	\$156.30	022493006 LoRetention	\$165.90	0030077822 SealMax	\$164.60
	960 tips (10 racks x 96 tips)					
 yellow	960 tips (10 racks x 96 tips)					
2 – 200 µL, 55 mm	022491296	\$156.30			0030077830 SealMax	\$164.60
	960 tips (10 racks x 96 tips)					
 orange	960 tips (10 racks x 96 tips)					
20 – 300 µL, 55 mm	022491245	\$156.30	022493004 LoRetention	\$177.50	0030077849 SealMax	\$164.60
	960 tips (10 racks x 96 tips)					
 blue	960 tips (10 racks x 96 tips)					
50 – 1,000 µL, 76 mm	022491253	\$161.50	022493008 LoRetention	\$177.50	0030077857 SealMax	\$169.70
	480 tips (5 racks x 96 tips)					
 dark green	480 tips (5 racks x 96 tips)					
50 – 1,250 µL L, 103 mm	022494002	\$84.90				

i For more information go to www.eppendorf.com/epTips



Liquid Handling

Volume range/ ep Dualfilter T.I.P.S.®/ ep Dualfilter T.I.P.S.® LoRetention/ ep Dualfilter T.I.P.S.® SealMax	Racks		PCR clean/Sterile (sterile and pyrogen-free)		 	
 violet	120 tips (5 racks x 24 tips)					
0.1 – 5 mL, 120 mm	022491261	\$89.00				
						
 violet	120 tips (5 racks x 24 tips)					
0.2 – 5 mL L, 175 mm	0030077725	Inquire				
						
 turquoise	100 tips, individually packed					
0.5 – 10 mL L, 243 mm	022491288	\$75.50				
						
(Image reduced size)						

Special Tips

Volume range/ pipette tip			
 light gray	Eppendorf GELoader®		
0.5 – 20 µL, 62 mm	192 tips (2 racks x 96 tips)		
	022351656	\$137.80	
	Microloader™		
0.5 – 20 µL, 100 mm	192 pcs. (2 racks x 96 pcs.)		
	930001007	\$169.00	
	Mastertip® (positive displacement tip)		
20 µL, 52 mm	480 tips (5 racks x 96 tips)		
	022354159	\$272.00	
			

epT.I.P.S.® Compatibility chart for Eppendorf Research® plus

Eppendorf Research® plus	0.1 – 10 µL S, dark gray	0.1 – 10 µL M, medium gray	0.1 – 20 µL medium gray	0.5 – 20 µL L, light gray	2 – 20 µL yellow	2 – 100 µL yellow	2 – 200 µL yellow	20 – 300 µL orange
								
epT.I.P.S.® Standard								
epT.I.P.S.® LoRetention volume pipettes								
ep Dualfilter T.I.P.S.®								
ep Dualfilter T.I.P.S.® LoRetention								
ep Dualfilter T.I.P.S.® SealMax								
Fixed volume pipettes								
10 µL	 							
20 µL								
10 µL								
20 µL								
25 µL/50 µL/100 µL								
200 µL								
200/ 250/ 500/ 1,000 µL								
Adjustable volume pipettes								
0.1 – 2.5 µL	 							
0.5 – 10 µL	 							
2 – 20 µL	 							
2 – 20 µL								
10 – 100 µL								
20 – 200 µL								
30 – 300 µL								
100 – 1,000 µL								
0.5 – 5 mL								
1 – 10 mL								

 normal volume
  limited volume

epT.I.P.S.® Compatibility chart for Eppendorf Xplorer®/Xplorer® plus

Eppendorf Xplorer®/ Eppendorf Xplorer® plus	0.1 – 10 µL S, dark gray	0.1 – 10 µL M, medium gray	0.1 – 20 µL medium gray	0.5 – 20 µL L, light gray	2 – 20 µL yellow	2 – 100 µL yellow	2 – 200 µL yellow	20 – 300 µL orange
	■	■	■	■	■	■	■	■
epT.I.P.S.® Standard	■		■	■			■	■
epT.I.P.S.® LoRetention	■			■			■	
ep Dualfilter T.I.P.S.®	■	■		■	■	■	■	■
ep Dualfilter T.I.P.S.® LoRetention	■			■		■		■
ep Dualfilter T.I.P.S.® SealMax	■		■			■	■	■
0.5 – 10 µL	■ ■	■	■	■				
5 – 100 µL	■				◆	■	■	◆
15 – 300 µL	■				◆	◆	◆	■
50 – 1,000 µL	■							
50 – 1,200 µL	■							
0.2 – 5 mL	■							
0.5 – 10 mL	■							

■ normal volume ◆ limited volume

50 – 1,000 µL blue	50 – 1,250 µL green	50 – 1,250 µL L, dark green	0.25 – 2.5 mL red	0.1 – 5 mL violet	0.2 – 5 mL L violet	0.5 – 10 mL turquoise	0.5 – 10 mL L turquoise	GELoader/ Microloader 0.5-20 µL

50 – 1,000 µL blue	50 – 1,250 µL green	50 – 1,250 µL L, dark green	0.25 – 2.5 mL red	0.1 – 5 mL violet	0.2 – 5 mL L violet	0.5 – 10 mL turquoise	0.5 – 10 mL L turquoise	GEloader/ Microloader 0.5-20 µL
								
								
								
								
								
								
								

epT.I.P.S.® Compatibility chart for Eppendorf Research® plus								
Eppendorf Reference® 2	0.1 – 10 µL S, dark gray	0.1 – 10 µL M, medium gray	0.1 – 20 µL medium gray	0.5 – 20 µL L, light gray	2 – 20 µL yellow	2 – 100 µL yellow	2 – 200 µL yellow	20 – 300 µL orange
epT.I.P.S.® Standard								
epT.I.P.S.® LoRetention								
ep Dualfilter T.I.P.S.®								
ep Dualfilter T.I.P.S.® LoRetention								
ep Dualfilter T.I.P.S.® SealMax								
Fixed volume pipettes								
1 µL/2 µL								
5 µL/10 µL								
20 µL								
10 µL								
20 µL								
25 µL/50 µL/100 µL								
200 µL								
200/ 250/ 500/ 1,000 µL								
2 mL/2.5 mL								
Adjustable volume pipettes								
0.1 – 2.5 µL								
0.5 – 10 µL								
2 – 20 µL								
2 – 20 µL								
10 – 100 µL								
20 – 200 µL								
30 – 300 µL								
100 – 1,000 µL								
0.25 – 2.5 mL								
0.5 – 5 mL								
1 – 10 mL								

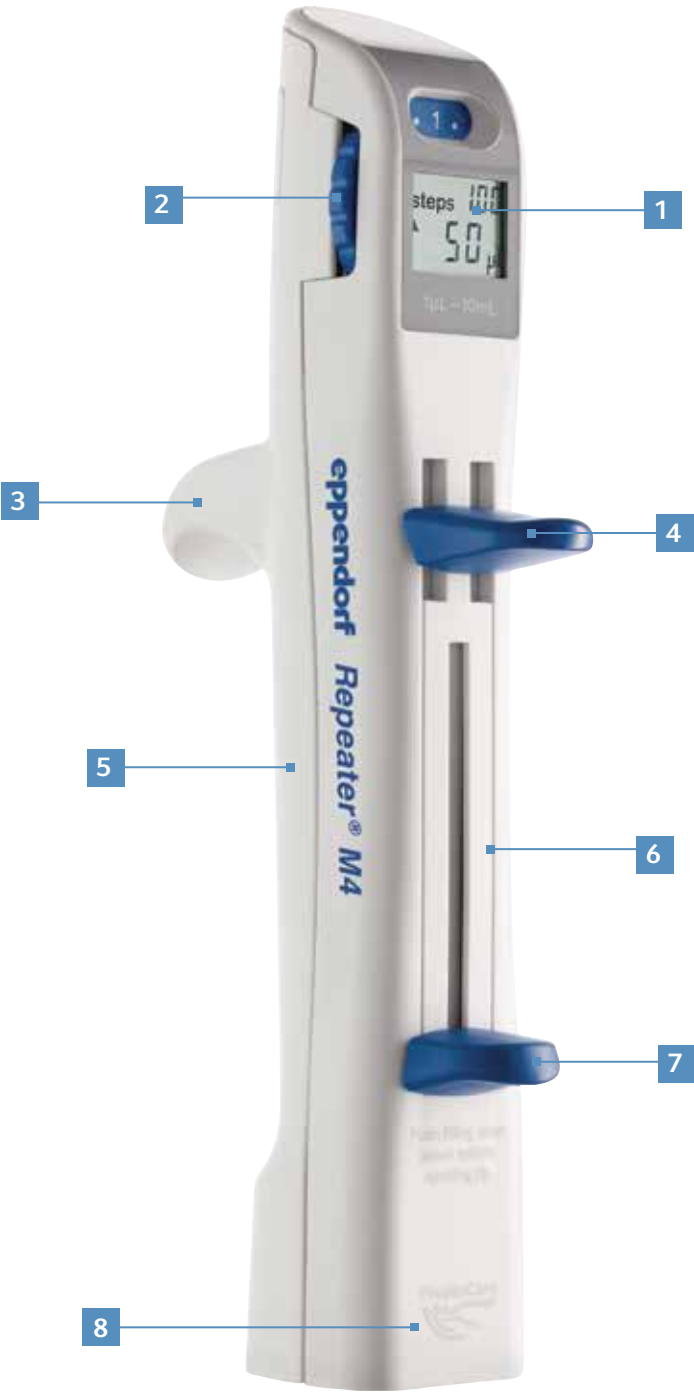
normal volume
 limited volume

i For more information go to www.eppendorf.com/epTips

50 – 1,000 μ L blue	50 – 1,250 μ L green	50 – 1,250 μ L L, dark green	0.25 – 2.5 mL red	0.1 – 5 mL violet	0.2 – 5 mL L violet	0.5 – 10 mL turquoise	0.5 – 10 mL L turquoise	GEloader/ Microloader
								
								
								
								
								
								
								
								
								
								
								
								
								
								
								
								



Repeater® M4



- 1. **Step counter:** Displays the number of executed dispensing steps
- 2. **Volume selection dial:** 20 different volume settings for every Combitip allowing for a total of 112 unique volume settings; Easy to reach and adjust using your thumb
- 3. **Hand rest:** Supports a relaxed hand position and ease of use. The overall light weight design allows for stress-free ergonomic pipetting.
- 4. **Ergonomically shaped operating lever:** Dispenses the liquid and serves as tip ejector to easily eject emptied Combitips advanced® with one hand.
- 5. **Motion sensor:** Repeater switches off when not in use, and back on with minimal movements to save power and time
- 6. **Eppendorf TrackIT:** Embedded RFID data chip for heightened traceability in combination with Eppendorf TrackIT
- 7. **Ergonomically shaped filling lever:** For filling and emptying the Combitips advanced
- 8. **Combitip sensor:** Automatic Combitip recognition and volume display

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Clearly arranged and easy-to-read display to ensure stress-free and intuitive operation. In addition to the displayed dispensing volume, the integrated step counter supports error-free filling of plates or large series of tubes.



Repeater M4 with 9 different volume sizes (0.1 mL - 50 mL) for Combitips advanced, offers a unique volume range of 1 µL - 10 mL. The new Combitip Rack features trouble-free and single-hand operation during dispensing work.

Description
With the Repeater M4/Combitip System, volumes are dispensed using the positive displacement principle. The liquid is directly dispensed without an air cushion, ensuring the correct volume is always dispensed regardless of the density, viscosity and volatility of the liquid. The Repeater M4 offers a unique volume range of 1 µL – 10 mL, and is the only mechanical dispenser that dispenses the aspirated liquid up to 100 times without refilling the tip. The innovative step counter supports error-free working even after an interruption or distraction during the dispensing procedure. A fully emptied Combitip can be easily ejected with one hand using the operation lever without directly touching the tip.

Applications
> Repetitive Dispensing of volumes in long series such as tube or plate filling, aliquoting reagents and kit usage
> Contamination-free dispensing of toxic, radioactive and other hazardous liquids
> Precise and accurate dispensing of viscous solutions (e.g. glycerol) or liquids with high vapor pressure (e.g. ethanol)

Product features
> Repetitive dispensing modes decrease the number of movements by allowing the user to fill the tip once and dispense up to 100 times without a refill
> Automatic Combitip recognition eliminates time-consuming volume calculations
> Wide dispensing range: 1 µL to 10 mL
> Stress-free work via integrated step counter: dispensing procedures can be continued error-free after an interruption or distraction
> Central Combitip ejector: fully emptied Combitip can be easily ejected with one hand
> Perfect for viscous or foaming solutions and liquids with high vapor pressure through positive displacement principle
> Safe handling of toxic, radioactive or infectious material



Repeater® M4



Unmistakably Eppendorf
The Eppendorf Combitips advanced feature the characteristic Eppendorf 3D design on the upper rim of the Combitip, allowing you to easily and confidently recognize the Eppendorf original!

Combitips advanced®	Min. volume	Max. volume	Increment	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾
0.1 mL	1 µL	20 µL	1 µL	2 µL	± 1.6 %	± 0.032 µL	± 3.0 %	± 0.06 µL
				10 µL	± 1.2 %	± 0.12 µL	± 2.4 %	± 0.24 µL
				20 µL	± 1.0 %	± 0.2 µL	± 2.0 %	± 0.4 µL
0.2 mL	2 µL	40 µL	2 µL	4 µL	± 1.3 %	± 0.052 µL	± 2.0 %	± 0.08 µL
				20 µL	± 0.8 %	± 0.16 µL	± 1.5 %	± 0.3 µL
				40 µL	± 0.8 %	± 0.32 µL	± 1.5 %	± 0.6 µL
0.5 mL	5 µL	100 µL	5 µL	10 µL	± 0.9 %	± 0.09 µL	± 1.5 %	± 0.15 µL
				50 µL	± 0.8 %	± 0.4 µL	± 0.8 %	± 0.4 µL
				100 µL	± 0.8 %	± 0.8 µL	± 0.6 %	± 0.6 µL
1 mL	10 µL	200 µL	10 µL	20 µL	± 0.9 %	± 0.18 µL	± 0.9 %	± 0.18 µL
				100 µL	± 0.6 %	± 0.6 µL	± 0.6 %	± 0.6 µL
				200 µL	± 0.6 %	± 1.2 µL	± 0.4 %	± 0.8 µL
2.5 mL	25 µL	500 µL	25 µL	50 µL	± 0.8 %	± 0.4 µL	± 0.8 %	± 0.4 µL
				250 µL	± 0.6 %	± 1.5 µL	± 0.6 %	± 1.5 µL
				500 µL	± 0.5 %	± 2.5 µL	± 0.3 %	± 1.5 µL
5 mL	50 µL	1,000 µL	50 µL	100 µL	± 0.6 %	± 0.6 µL	± 0.6 %	± 0.6 µL
				500 µL	± 0.5 %	± 2.5 µL	± 0.5 %	± 2.5 µL
				1,000 µL	± 0.5 %	± 5 µL	± 0.25 %	± 2.5 µL
10 mL	100 µL	2,000 µL	100 µL	200 µL	± 0.5 %	± 1 µL	± 0.6 %	± 1.2 µL
				1,000 µL	± 0.5 %	± 5 µL	± 0.4 %	± 4 µL
				2,000 µL	± 0.5 %	± 10 µL	± 0.25 %	± 5 µL
25 mL	250 µL	5,000 µL	250 µL	500 µL	± 0.4 %	± 2 µL	± 0.6 %	± 3 µL
				2,500 µL	± 0.3 %	± 7.5 µL	± 0.5 %	± 12.5 µL
				5,000 µL	± 0.3 %	± 15 µL	± 0.25 %	± 12.5 µL
50 mL	500 µL	10,000 µL	500 µL	1,000 µL	± 0.3 %	± 3 µL	± 0.5 %	± 5 µL
				5,000 µL	± 0.3 %	± 15 µL	± 0.5 %	± 25 µL
				10,000 µL	± 0.3 %	± 30 µL	± 0.3 %	± 30 µL

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to www.eppendorf.com



Volume table for using the Combitips advanced with the Repeater® M4																				
Position of the volume selection dial:																				
	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
Maximum number of dispensing steps:																				
	100	50	33	25	20	16	14	12	11	10	9	8	7	7	6	6	5	5	5	5
Combitips advanced with the following dispensing volumes:																				
0.1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
0.2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
0.5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
1.0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
2.5	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
5.0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1.0
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	mL
10	100	200	300	400	500	600	700	800	900	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
mL	µL	µL	µL	µL	µL	µL	µL	µL	µL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL
25	250	500	750	1.0	1.25	1.5	1.75	2.0	2.25	2.5	2.75	3.0	3.25	3.5	3.75	4.0	4.25	4.50	4.75	5.0
mL ¹	µL	µL	µL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL
50	500	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10
mL ¹	µL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL	mL

Ordering information		
Description	Catalog No.	List USD
Repeater® M4, with Combitip Rack and Combitip assortment pack (1 Combitip of each size)	4982000322	\$572.00
Pipette carousel, with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	022444905	152.00
Holder, for Repeater® M4, for wall mount and/or pipette carousel	4982602004	26.00
Spare battery for Repeater® M4 and Repeater plus, 3 V	4980215003	13.50



NEW - Repeater® E3/E3x



1. Flexible charging options: Ability to recharge by connecting the power cord directly to the unit or on the charging stand

2. Selection dial: Indicates the current operating mode at a glance and makes programming much easier

3. Large illuminated color display: indicates the volume settings, number of dispensing steps, and speed of aspiration/dispense while also providing feedback and instruction for the user in 9 languages

4. Rocker: Easily scroll through and alter mode specific parameters for quick execution of editing programs

5. Actuator key: multipurpose button is used for initiating aspiration and dispensing steps as well as saving parameter settings

6. Hand rest: for secure and comfortable support allowing the user to pipette long series with ease

7. Ejector Button: Ergonomic one-handed and contamination free release of the Combitip

8. Routine applications: save up to 5 of your favorite programs per operating mode and per Combitip size for a total of 225 programs

9. Eppendorf TrackIT: Embedded RFID data chip for heightened traceability in combination with Eppendorf TrackIT

10. Combitip sensor: Automatic Combitip recognition and volume display



i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Save time
The Eppendorf Repeater pipettes make long pipetting series faster and easier. The aspirated liquid can be dispensed up to 100 times without a refill. It is an ideal and smart solution for filling plates or large series of tubes (e.g., nucleic acid purification kits).

Description
The Repeater E3/E3x, in combination with the Combitips advanced®, creates a versatile dispensing system that functions according to the positive displacement principle and is therefore capable of pipetting any liquid while maintaining the highest standards for accurate results. The motor-driven dispenser gives you full volume control, improved accuracy and reproducibility while reducing physical strain during use. The repetitive dispensing modes contribute to reducing fatigue by decreasing the number of movements for the user; filling the tip once allows dispensing up to 100 times. The system is an essential lab tool ideal for all liquid handling applications, accommodating more than 5,000 different dispensing volumes between 1 µL to 50 mL.

- Applications**
- > Repetitive dispensing of volumes in long series such as tube or plate filling, aliquoting reagents and kit usage (Dispensing/ Automatic Dispensing modes)
 - > Contamination-free dispensing for toxic, radioactive and other hazardous liquids (all available modes)
 - > Precise and accurate dispensing of viscous solutions (e.g. glycerol) or liquids with high vapor pressure (e.g. ethanol) (all available modes)
 - > Pooling of supernatants (Aspiration mode)
 - > Creation of dilution Series (Sequential Dispensing mode)
 - > Concentration Determination (Titration mode)
 - > Pooling and volume determination with subsequent dispensing (Aspirate & Dispense mode)

➤ Further information about Combitips advanced see on page 70.



NEW - Repeater® E3/E3x



Relax
With the light weight Repeater E3 the risk of repetitive strain injuries is reduced in various ways. It minimizes operation forces through an electronic motor drive, and buttons are positioned to accommodate natural hand movements. A new enlarged display reduces eye strain when reviewing settings.



Work precisely and safely
The optimized system of Repeater and Combitips advanced® allows automatic tip recognition for ease of use. The syringe-style Combitip maximizes pipetting accuracy and precision. It is not affected by liquid properties, most manual pipetting errors and provides protection from aerosol contamination.

Positive-displacement Principle
With the Repeater/Combitips system volumes are dispensed using the positive-displacement principle. The liquid is directly dispensed without an air cushion, ensuring the correct volume is always dispensed regardless of the density, viscosity and volatility of the liquid. In addition to serial dispensing, the Repeater/Combitip system is the instrument to go beyond the limitations of a standard pipette.

The Repeater/Combitip positive-displacement principle:

- > Allows high-precision dispensing regardless of the physical properties of the liquid (viscous liquids with high resistance to flow [e.g. glycerol], liquids with a different density than water, liquids with high vapor pressure [e.g. acetone], liquids containing detergent lowering the surface tension, foaming liquids and liquids with different temperatures)
- > Prevents aerosol contamination with hermetically sealed piston for secure dispensing of hazardous samples
- > Provides protection from radioactive and toxic substances
- > Enables quick dispensing of long series with precise, repeated dispensing of identical volumes
- > Accurate pipetting independent of common errors such as pipetting angle and immersion depth of the tip seen with air-cushion pipettes

See videos of the Repeater system in action at:
multipipette-system.eppendorf.com



Repeater E3



Repeater E3x

Repeater E3 and Repeater E3x at a glance	Repeater E3	Repeater E3x
High speed dispensing with motorized piston	■	■
Speed adjustment to match the viscosity of your liquid and the size of your vessel to prevent air bubbles and splashing	■	■
Automatic Combitip advanced® tip recognition	■	■
One button tip ejection	■	■
Volume range from 1 µL to 50 mL, over 5,000 possible dispensing volumes	■	■
NEW! Big Illuminated color display in 9 languages	■	■
NEW! Sleep mode saves battery when not in use	■	■
Long life Li-ion battery	■	■
Modes of operation	4	8
Pipetting (Pip): Precise liquid transfer of up to 50 mL	■	■
Dispensing (Dis): Serial dispensing for up to 100 steps in a row	■	■
Automatic dispensing (Ads): Volume is dispensed at fixed intervals between 0.1 s and 10 s	■	■
Sequential dispensing (Seq): Individual volume setting for up to 16 dispensing steps		■
Aspirate (Asp): consecutive aspiration of liquid for pooling into one Combitip		■
NEW! Aspirate and Dispense (A/D): Uptake and volume calculation of an unknown volume with immediate dispense in desired partial volumes		■
Titration (Tit): Sensitive dosing of liquids while dispensed volume is measured		■
NEW! Options (Opt): Save favorite settings, set service intervals, activate key lock and more	■	■



NEW - Repeater® E3/E3x

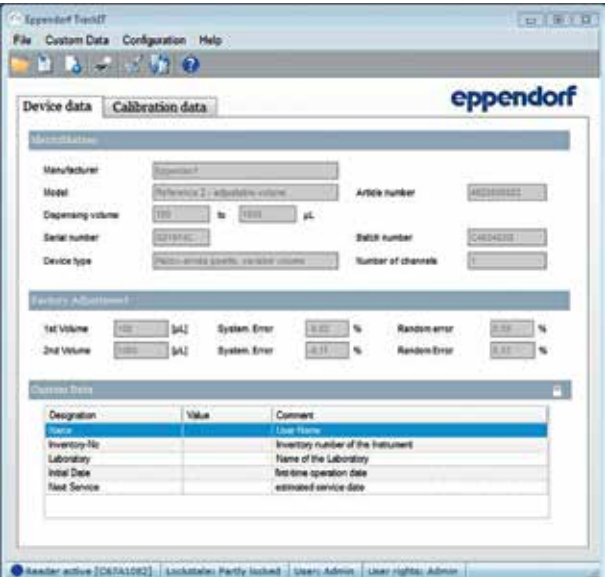
Combitips advanced®	Min. volume	Max. volume	Increment	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾
0.1 mL	1 µL	100 µL	0.1 µL	10 µL	± 1.6 %	± 0.16 µL	± 2.5 %	± 0.25 µL
				50 µL	± 1.0 %	± 0.5 µL	± 1.5 %	± 0.75 µL
				100 µL	± 1.0 %	± 1 µL	± 0.5 %	± 0.5 µL
0.2 mL	2 µL	200 µL	0.2 µL	20 µL	± 1.3 %	± 0.26 µL	± 1.0 %	± 0.2 µL
				100 µL	± 1.0 %	± 1 µL	± 1.0 %	± 1 µL
				200 µL	± 1.0 %	± 2 µL	± 0.5 %	± 1 µL
0.5 mL	5 µL	500 µL	0.5 µL	50 µL	± 0.9 %	± 0.45 µL	± 0.8 %	± 0.4 µL
				250 µL	± 0.9 %	± 2.25 µL	± 0.5 %	± 1.25 µL
				500 µL	± 0.9 %	± 4.5 µL	± 0.3 %	± 1.5 µL
1 mL	10 µL	1 mL	1 µL	100 µL	± 0.9 %	± 0.9 µL	± 0.55 %	± 0.55 µL
				500 µL	± 0.6 %	± 3 µL	± 0.2 %	± 1 µL
				1,000 µL	± 0.6 %	± 6 µL	± 0.3 %	± 3 µL
2.5 mL	25 µL	2.5 mL	2.5 µL	250 µL	± 0.8 %	± 2 µL	± 0.45 %	± 1.125 µL
				500 µL	± 0.5 %	± 2.5 µL	± 0.30 %	± 1.5 µL
				2,500 µL	± 0.5 %	± 12.5 µL	± 0.15 %	± 3.75 µL
5 mL	50 µL	5 mL	5 µL	500 µL	± 0.8 %	± 4 µL	± 0.35 %	± 1.75 µL
				1,000 µL	± 0.5 %	± 5 µL	± 0.25 %	± 2.5 µL
				5,000 µL	± 0.5 %	± 25 µL	± 0.15 %	± 7.5 µL
10 mL	100 µL	10 mL	10 µL	1,000 µL	± 0.5 %	± 5 µL	± 0.25 %	± 2.5 µL
				5,000 µL	± 0.4 %	± 20 µL	± 0.25 %	± 12.5 µL
				10,000 µL	± 0.4 %	± 40 µL	± 0.15 %	± 15 µL
25 mL	250 µL	25 mL	25 µL	2,500 µL	± 0.3 %	± 7.5 µL	± 0.35 %	± 8.75 µL
				5,000 µL	± 0.3 %	± 15 µL	± 0.25 %	± 12.5 µL
				25,000 µL	± 0.3 %	± 75 µL	± 0.15 %	± 37.5 µL
50 mL	500 µL	50 mL	50 µL	5,000 µL	± 0.3 %	± 15 µL	± 0.50 %	± 25 µL
				10,000 µL	± 0.3 %	± 30 µL	± 0.20 %	± 20 µL
				50,000 µL	± 0.3 %	± 150 µL	± 0.15 %	± 75 µL
¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used. Technical specifications are subject to change. Errors and omissions excepted.								

Ordering information

Description	Catalog No.	List USD
Repeater® E3 , with charging cable and Combitips advanced® assortment pack (1 Combitip of each size), Possible volume range 1 µL-50 mL	4987000118	\$1,000.00
Repeater® E3 bundle incl. charger stand , with charging cable and Combitips advanced® assortment pack (1 Combitip of each size), Possible volume range 1 µL-50 mL	4987000398	1,100.00
Repeater® E3x , with charging cable and Combitips advanced® assortment pack (1 Combitip of each size), Possible volume range 1 µL–50 mL	4987000134	1,200.00
Repeater® E3x bundle incl. charger stand , with charging cable and Combitips advanced® assortment pack (1 Combitip of each size), Possible volume range 1 µL-50 mL	4987000410	1,300.00
Charger stand , for electronic Repeater®, for one device	4880000018	260.00
Charger carousel , for 4 Eppendorf Xplorer®/Eppendorf Xplorer® plus (charger shells for electronic Repeater® available)	4880000026	782.00
Repeater® charger shell , for charger carousel (4880000026)	4880601003	105.00
Wall mount for electronic Repeater®	4986604001	34.00
Spare charging cable , for Eppendorf Xplorer®, electronic Repeater®, and charger stand	4986603005	33.70
Spare charging cable , for charger carousel for Eppendorf Xplorer® and electronic Repeater®	4880603006	57.50



Eppendorf TrackIT



Description

To increase the traceability of your pipette portfolio Eppendorf offers Eppendorf TrackIT. This product contains a RFID reader and software to scan the device data of an embedded RFID chip within liquid handling instruments and save it in a database which can be opened at any time. The device data can be exported individually or automatically in various formats. In combination with premium products like Eppendorf Reference® 2 Eppendorf TrackIT offers also the ability to add your own data on the chip like calibration time, location, special application or other important data. Simple identification and documentation with Eppendorf TrackIT!

Product features

- > Unambiguous instrument identification: Nearly every liquid handling device is equipped with a RFID chip containing all relevant pipette data like serial number, dispensing volume, factory adjustment data etc. These data clearly identify the pipette and cannot be changed or deleted
- > Easy documentation including specific user information
- > The Eppendorf TrackIT software exports information to several formats (HTML, XML and CVS) to implement the system into existing software like electronic lab book or LIMS

Applications

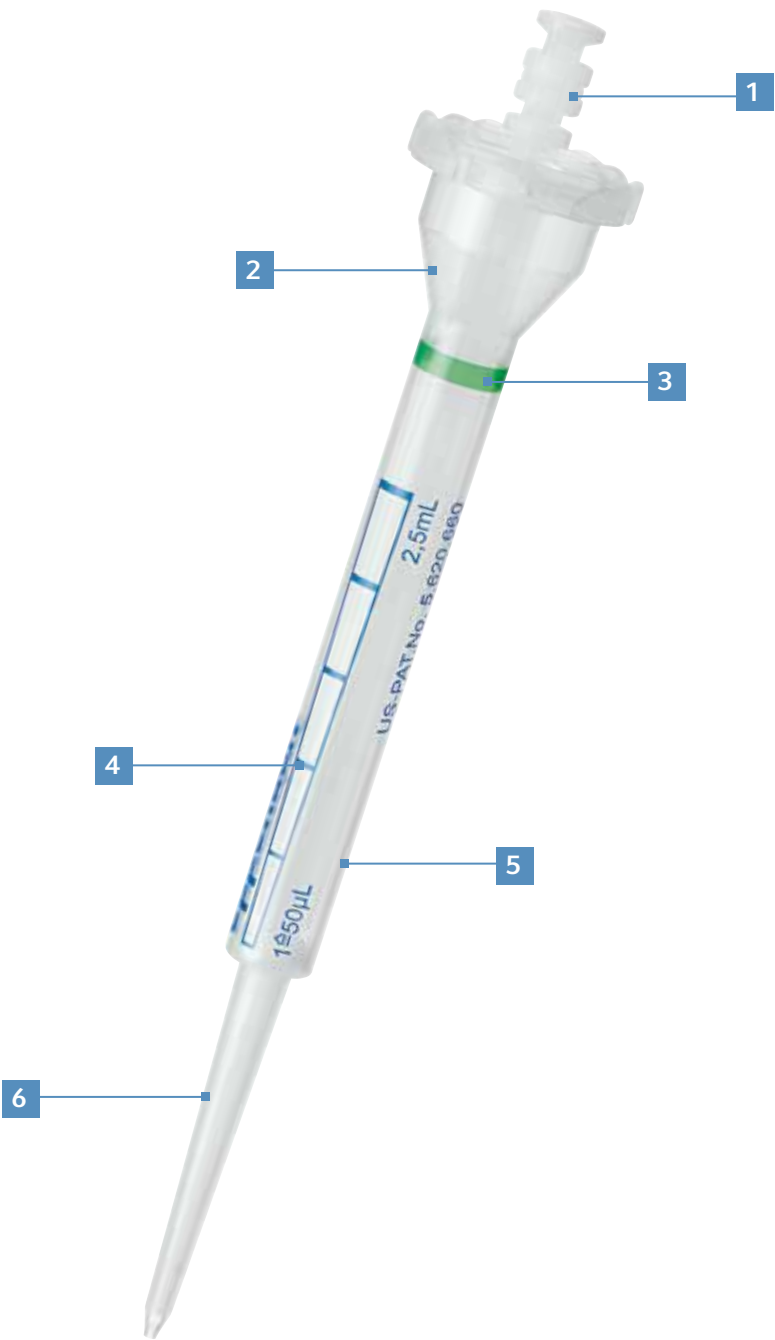
- > Instrument identification
- > Traceability of instruments used in an experiment
- > Individualization of the instrument
- > Printed documentation of all relevant instrument data
- > Make all relevant instrument information available for digital documentation
- > Documentation of service history

Ordering information

Description	Catalog No.	List USD
Eppendorf TrackIT , RFID Reader and Software	3903000014	\$625.00



Combitips advanced®



- 1. Repeater® connection:**
Automatic Combitip recognition eliminates time consuming volume calculations
- 2. Ergonomic design:**
Unique funnel geometry prevents damage to gloves and ensures comfortable handling when inserting into Repeater® dispensers
- 3. Individually color coded:**
Quick identification of the desired Combitips facilitates a speedy workflow (color coding is also visible on packaging!)
- 4. Optimized graduations:**
Visibility of liquid volume using optimized graduations
- 5. Made of virgin polypropylene:**
Manufactured without the use of slip agents, plasticizers, and biocides—substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
- 6. Elongated tips (for 2.5 mL, 5 mL and 10 mL):**
Complete emptying of the most common laboratory vessels prevents sample loss



Description
In 1978 Eppendorf revolutionized the industry and laboratory workflow with the introduction of the Combitip / Repeater® system and has been the leader in market innovations for the past 35 years. The NEW Eppendorf Combitips advanced have been completely redesigned and optimized to meet all the needs of any modern laboratory. The Combitips advanced also function according to the positive displacement principle, thus they always dispense the correct volume independently of the density of the liquid and its flow characteristics (e.g. increased vapor pressure or increased viscosity). Working with radioactive or toxic materials also becomes safer due to the hermetically sealed piston preventing aerosol contamination.

- Product features**
- > Positive displacement principle (comparable to a syringe)
 - > High-precision dispensing regardless of the density and viscosity of the liquid
 - > Prevents aerosol contamination with hermetically sealed piston for secure dispensing
 - > Provides protection from radioactive and toxic substances
 - > Quick dispensing of long series with precise, repeated dispensing of identical volumes (with Repeater® hand dispensers)

Compatibility Chart									
Combitips advanced®	Eppendorf Safe-Lock Tubes				Conical Tubes		Eppendorf Deepwell Plates		
	0.5 mL	1.5 mL	2.0 mL	5.0 mL	15 mL	50 mL	96/500 µL	96/1000 µL	96/2000 µL
0.1 mL	+	+	+	+	-	-	+	+	+
0.2 mL	+	+	+	+	-	-	+	+	+
0.5 mL	+	+	+	+	-	-	+	+	+
1.0 mL	+	+	+	+	-	-	+	+	+
2.5 mL	++	++	++	+	++	++	+	++	++
5.0 mL	+	+	+	+	++	++	+	+	+
10 mL	+	+	+	-	-	++	+	+	+
25 mL	-	+	+	-	-	-	+	+	+
50 mL	-	+	+	-	-	-	+	+	+

++ = improved compatibility compared to Combitip plus generation





Combitips advanced®



Intelligent packaging
with the redesigned dispenser box (for Eppendorf Quality™ and PCR Clean) with extractable chute, Combitips advanced are always within reach. Portioning in 4 bags (25 pcs. each) ensures dust-free storage.



Always easy to reach
The new Combitip Rack features trouble-free and single-hand operation during dispensing work. The rack holds up to 8 Combitips advanced in sizes ranging from 0.1 mL to 10 mL. The transparent tray allows for the sizes of the Combitips to be easily identified using the color coding.



Unmistakably Eppendorf
The Eppendorf Combitips advanced feature the characteristic Eppendorf 3D design on the upper rim of the Combitip, allowing you to easily and confidently recognize the Eppendorf original!

Variety and selection
With 9 volume sizes (0.1 mL to 50 mL) and 3 purity grades (Eppendorf Quality, PCR clean, sterile and Eppendorf Biopur®) you will always find the perfect Combitip for your application! The “sterile” and “Eppendorf Biopur” tips are individually blister-wrapped and feature an access tab which makes them easier to open, even with gloves!

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Ordering information									
Combitips advanced	Color Code	Eppendorf Quality™ 100 pcs. (4 bags x 25 pcs.)	List USD	PCR clean 100 pcs. (4 reclosable bags x 25 pcs.)	List USD	Sterile 100 pcs., individually wrapped	List USD	Eppendorf Biopur® 100 pcs., individually wrapped	List USD
0.1 mL	white	0030089405	\$119.30	0030089766	\$151.00	0030089510	\$151.00	0030089618	\$170.30
0.2 mL	light blue	0030089413	119.30	0030089774	151.00	0030089529	151.00	0030089626	170.30
0.5 mL	violet	0030089421	119.30	0030089782	151.00	0030089537	151.00	0030089634	170.30
1.0 mL	yellow	0030089430	119.30	0030089790	151.00	0030089545	151.00	0030089642	170.30
2.5 mL	green	0030089448	119.30	0030089804	151.00	0030089553	151.00	0030089650	170.30
5.0 mL	blue	0030089456	119.30	0030089812	151.00	0030089561	151.00	0030089669	170.30
10 mL	orange	0030089464	119.30	0030089820	151.00	0030089570	151.00	0030089677	170.30
25 mL¹	red	0030089472	151.00	0030089839	176.50	0030089588	176.50	0030089685	193.80
50 mL¹	light gray	0030089480	151.00	0030089847	176.50	0030089596	176.50	0030089693	193.80
Accessories									
Adapter advanced									
25 mL adapter, 1 pc.	red	0030089715	22.40						
25 mL adapter, 7 pcs.	red							0030089731	133.60
50 mL adapter, 1 pc.	light gray	0030089723	22.40						
50 mL adapter, 7 pcs.	light gray							0030089740	133.60
Combitips advanced Rack, for 8 Combitips advanced (0.1–10 mL)		0030089758	41.82						
Combitips advanced assortment pack (1 Combitip of each size)		0030089936	19.40						

¹ 4 boxes of 25 pcs. each. Each box containing one adapter.



Biomaster®



Description
Experience contamination free pipetting in the 1 µL to 20 µL volume range with the Eppendorf Biomaster. This adjustable pipette is used in combination with the positive displacement tips to eliminate the formation of aerosols – the most common cause for pipette and sample contamination. The positive displacement tip is also ideal for accurate pipetting of viscous solutions or liquids with high-vapor pressure.

Product features
> Mastertip® is a syringe-style positive displacement tip to prevent pipette contamination and guarantee accurate pipetting of viscous solutions or liquids with high-vapor pressure

Combination	Volume range	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾
Biomaster®	1 – 20 µL	2 µL	±6.0 %	0.12 µL	±4.0 %	0.08 µL
		10 µL	±3.0 %	0.30 µL	±1.5 %	0.15 µL
		20 µL	±2.0 %	0.40 µL	±0.8 %	0.16 µL

¹⁾ The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

Ordering information

Description	Catalog No.	List USD
Biomaster® Kit , Consisting of: 1 Biomaster® with continuous volume selection in the 1–20 µL range 1 box with 96 Mastertips, 1 – 20 µL	022440501	\$475.00
Mastertip® , positive displacement tip with piston, assembled ready-to-use, Eppendorf Quality™, 20 µL, 52 mm, light gray, 480 tips (5 racks x 96 tips)	022354159	272.00
Pipette carousel , with 6 holders, for Eppendorf Research® plus and Biomaster®	022444905	152.00
Holder , for Eppendorf Research® plus and Biomaster®, for pipette carousel	3115600019	19.88
Wall mount , for Eppendorf Research® plus and Biomaster®, with hook and loop strip	022444913	34.00

i For more information go to www.eppendorf.com



Maxipettor®



Description
The Eppendorf Maxipettor® is a large volume pipette optimized for work with viscous or high-vapor pressure solutions. It also allows for aspirating liquids from large bottles or tall, narrow vessels when using the Maxitip S system. Its super easy, one-hand operation significantly speeds up pipetting tasks: Simply press down the operating lever to aspirate liquid from the reservoir. Press the lever again and the liquid will be dispensed into your sample vessel.

Product features
> Volume range: 1 mL to 10 mL
> Fast pipetting and convenient operation due to unique one-hand operation. Liquid automatically aspirates and dispenses by simply pressing the operating lever
> 4-digit volume display and adjustable in 10 µL increments for accurate volume setting
> Eppendorf Maxitip® P (fig.1) is a syringe-style, positive displacement tip that allows for accurate pipetting of viscous solutions or of liquids with high-vapor pressure
> The Eppendorf Maxitip® S system, consisting of the dispensing part (fig.2) and Maxitip (fig.3), is optimized for aspiration liquids from large bottles or tall, narrow vessels
> The valve for use together with the Maxitip® S system ensures drip-free dispensing of volatile solutions

Combination	Volume range	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾
Maxipettor and Maxitip S system	2.5 – 10 mL	2.5 mL	±1.0 %	0.025 mL	±0.2 %	0.005 mL
		5 mL	±0.4 %	0.02 mL	±0.2 %	0.01 mL
		10 mL	±0.3 %	0.03 mL	±0.2 %	0.02 mL
Maxipettor and Maxitip P	1 – 10 mL	1 mL	±0.6 %	0.006 mL	±0.2 %	0.002 mL
		5 mL	±0.5 %	0.025 mL	±0.1 %	0.005 mL
		10 mL	±0.3 %	0.03 mL	±0.1 %	0.01 mL

¹⁾ The error data, according to EN ISO 8655, only applies if original Eppendorf tips are used. Technical specifications are subject to change. Errors and omissions excepted.

Ordering information

Description	Catalog No.	List USD
Maxipettor® , with continuous volume selection in the 1–10 mL range , 1 – 10 mL	022290002	\$785.00
Pipette carousel , with 6 holders, for Eppendorf Research® plus and Biomaster® 4830	022444905	152.00
Pipette holder , for Maxipettor®, for pipette carousel	022260588	26.00
Wall mount , for Maxipettor®, with adhesive surface	022260596	34.00
Eppendorf Maxitip® P , to remove liquid from smaller vessels, 100 pieces	022291050	211.10
Eppendorf Maxitip® S Starter Kit , to remove liquid from narrow-necked vessels and measuring flasks, consisting of 100 Maxitips, 10 dispensing parts, 10 valves	022291301	197.90
Eppendorf Maxitip® S dispensing part , 30 pieces	022291408	153.00
Eppendorf Maxitip® S , graduated, 200 pieces	022291351	169.30
Eppendorf Maxitip® S valve , 100 pieces	022291459	75.50



Eppendorf Easypet® 3



Description
Experience a new dimension of electronic pipetting with the new Eppendorf Easypet® 3. The latest technological developments give you complete speed control with the utmost precision. The lightweight, well-balanced Easypet 3 has been designed considering all ergonomic findings to fit comfortably in your hand and matches its shape to allow for fatigue-free pipetting.

- Product features**
- > Intuitive and convenient speed adjustment simply done with the tips of your fingers
 - > Lightweight, well-balanced and ergonomic design that allows for fatigue-free pipetting
 - > Vibrant backlit LEDs provide optical feedback of the remaining battery life
 - > Lithium polymer rechargeable battery offers long cordless runtime
 - > Smooth setting of pump speed
 - > Operation while recharging is possible
 - > Autoclavable pipette adapter for sterile applications
 - > Quick release of aspirating cone for easy exchange of membrane filters

- Applications**
- > Pipette controller for use with pipettes from 0.1 – 100 mL
 - > Serial dispensing of aliquots of different volumes
 - > Resuspension of bacteria or cell pellets
 - > Aspiration of cell layer from, e.g., Ficoll® gradient

i For more information go to www.eppendorf.com/Easypet3



Lightweight, well-balanced and ergonomic design ensures fatigue-free pipetting.



Available with shelf stand and battery status display LEDs for your peace of mind.

Technical specifications	
Model	Eppendorf Easypet® 3
Volume range	0.1 – 100 mL
Weight	160 g
Rechargeable battery	
Capacity	1,100 mAh/3.7 V
Charging time	~3 h
Type	Lithium polymer
Number of dispensings	~2,000 (with a 25 mL pipette)
Operation	electronic
Pipetting type	air-cushion
Mains/power supply	
Input	100 V – 240 V AC ± 10 %, 50 Hz – 60 Hz, 0.5 A
Output	5 V DC, 1.0 A

Ordering information		
Description	Catalog No.	List USD
Eppendorf Easypet® 3, incl. charging cable, wall mounting device, shelf stand, 2 membrane filters 0.45 µm	4430000018	\$465.00
Membrane filter, for Easypet® 4421 and Easypet® 3, 0.45 µm, sterile, PTFE, 5 pcs.	4421601009	57.50
Membrane filter, for Easypet® 4421 and Easypet® 3 , 0.2 µm, sterile, PTFE, 5 pcs.	4430606005	125.00
Spare battery, for Easypet® 3	4430605009	36.90
Wall holder	4430604002	34.00
Shelf stand	4430603006	24.00



Eppendorf Serological Pipets



Description
Eppendorf completes its portfolio in liquid handling with the new line of Eppendorf Serological Pipets. Experience the quality and convenience in liquid handling you have trusted in for decades with Eppendorf’s newest system: Eppendorf Easypet® 3 and Eppendorf Serological Pipets. Eppendorf’s new serological pipets are designed to work in perfect harmony with your Easypet 3. The pipets offer precise graduations overlaid on the ultra-clear pipet material to facilitate quick and easy reading of the volume. The pipets are individually wrapped and packaged in a robust dispenser box to ensure consistent premium quality.

- Product features**
- > Dense filter prevents aerosol contamination
 - > Clear and precise graduations for easy volume determination
 - > Color-coding for easy identification of pipet sizes
 - > Individually wrapped pipets for reliable sterility
 - > Ultra-pure virgin polystyrene meeting the requirement of USP IV
 - > Harmonized and well-fitting operation with Easypet 3, compatibility with all existing pipet helper
 - > Sterility assurance level of 10⁻⁶
 - > Certified absence of detectable pyrogens, DNA, RNase & DNase
 - > Certified non-cytotoxic

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Sharp graduation and ultra-clear material facilitate exact and easy read-out when working with Eppendorf serological pipets.



Individually wrapped pipets and an outer package with dispenser option keeps the products clean and safe. At the same time, easy opening and removal from box provide convenience while working with the product.

Ordering information		
Description	Catalog No.	List USD
Eppendorf Serological Pipets, sterile, free of detectable pyrogens, DNA, RNase & DNase. Non-cytotoxic		
1 mL, yellow, 800 pcs. (4 bags x 200 pcs.)	0030127692	\$171.50
2 mL, green, 600 pcs. (4 bags x 150 pcs.)	0030127706	142.90
5 mL, blue, 400 pcs. (4 bags x 100 pcs.)	0030127714	121.50
10 mL, orange, 400 pcs. (4 bags x 100 pcs.)	0030127722	135.80
25 mL, red, 200 pcs. (4 bags x 50 pcs.)	0030127730	128.80
50 mL, violet, 160 pcs. (4 bags x 40 pcs.)	0030127749	300.10



Eppendorf Pipet Helper®



Description
The Eppendorf Pipet Helper is the perfect instrument for inexperienced users as its robust and intuitive design allows everybody to adjust the meniscus precisely. In addition the valve unit is optimized so that liquids can be drawn up simply, without exerting pressure. The aspiration bulb provides rapid filling of the pipet. The aspiration and dispensing of liquids are controlled gently by the ergonomic lever. Additionally a splash free blow-out is provided. The specially designed aspirating cone ensures secure seating for all measuring and volumetric pipets (glass and plastic).

- Applications**
- > Preparation of a buffer for chromatography
 - > Preparation of a fluid for fermentation
 - > Sample transfer within petrochemistry
 - > Generate a sample for water analysis
 - > Preparation of assays

Ordering information		
Description	Catalog No.	List USD
Eppendorf Pipet Helper®, 0.1 – 200 mL	4423000010	\$83.00
Membrane filter, for Eppendorf Pipet Helper®, 3 µm, not sterile	022231103	57.50

- Product features**
- > Lightweight with reduced operating force
 - > Easy maintenance and cleaning due to easy disassembly, few parts and being fully autoclavable
 - > Comfortable working because of the low weight and good balance
 - > The aspirating bulb enables pipetting of volumes up to 100 mL at once
 - > Single lever controls low force aspirating and dispensing
 - > High control over the liquid movement due to very sensitive valve unit
 - > Drop wise dispensing and blow out without splashing
 - > Drainage without any additional pressure delivers very reproducible results
 - > Drip stop via hydrophobic membrane filter (3 µm)
 - > The special silicon pipet adapter guarantees a secure pipette fit

Varispenser®/ Varispenser® plus



- Product features**
- > Telescopic filling-tube for use with bottles up to 36 cm (14.2 in) height
 - > All dispensing components are made from highly chemical resistant materials
 - > Thread adapters are manufactured from polypropylene. For work with more aggressive chemicals, PTFE adapters are optionally available
 - > Volume setting can be locked to prevent accidental changes
 - > Possibility to attach a spiral, 80 cm long discharge tube to allow for easy filling of large tube quantities or into vessels further away from the reagent bottle
 - > Inline filter attachment possible to help prevent supply bottle contamination
 - > The optional drying tube can be filled with absorbing agent to protect reagent against humidity or CO₂
 - > Easy to disassemble for cleaning and maintenance
 - > Autoclavable
 - > Wiping piston design prevents crystallization of liquid

Description
The Eppendorf Varispenser and Varispenser plus are the ideal choices for dispensing aliquots of liquid from supply and reagent bottles. Available in 6 sizes for dispensing volumes from 0.25 – 100 mL, the design of these instruments make them capable of consistently dispensing selected volumes without reagent waste. All Varispenser bottletop dispensers are fully autoclavable for maximum safety in your lab. The Varispenser plus additionally provides a recirculation valve to prevent reagent loss while ventilating and a simple calibration function.

- Applications**
- > For dispensing liquid from reagent bottles



Adapters



Spiral discharge tube

i For more information go to www.eppendorf.com





Varispenser®/ Varispenser® plus

Ordering information					
Volume range	Dispensing step	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾
Varispenser®					
0.5 – 2.5 mL	0.05 mL	0.25 mL	± 6 %	± 0.015 mL	± 1 %
		1.25 mL	± 1.2 %	± 0.015 mL	± 0.2 %
		2.5 mL	± 0.6 %	± 0.015 mL	± 0.1 %
1 – 5 mL	0.1 mL	1 mL	± 2.5 %	± 0.025 mL	± 0.5 %
		2.5 mL	± 1 %	± 0.025 mL	± 0.2 %
		5 mL	± 0.5 %	± 0.025 mL	± 0.1 %
2 – 10 mL	0.2 mL	2 mL	± 2.5 %	± 0.05 mL	± 0.5 %
		5 mL	± 1 %	± 0.05 mL	± 0.2 %
		10 mL	± 0.5 %	± 0.05 mL	± 0.1 %
5 – 25 mL	0.5 mL	5 mL	± 2.5 %	± 0.125 mL	± 0.5 %
		12.5 mL	± 1 %	± 0.125 mL	± 0.2 %
		25 mL	± 0.5 %	± 0.125 mL	± 0.1 %
10 – 50 mL	1.0 mL	10 mL	± 2.5 %	± 0.25 mL	± 0.5 %
		25 mL	± 1 %	± 0.25 mL	± 0.2 %
		50 mL	± 0.5 %	± 0.25 mL	± 0.1 %
20 – 100 mL	2.0 mL	20 mL	± 2.5 %	± 0.5 mL	± 0.5 %
		50 mL	± 1 %	± 0.5 mL	± 0.2 %
		100 mL	± 0.5 %	± 0.5 mL	± 0.1 %
Varispenser® plus					
0.5 – 2.5 mL	0.05 mL	0.25 mL	± 6 %	± 0.015 mL	± 1 %
		1.25 mL	± 1.2 %	± 0.015 mL	± 0.2 %
		2.5 mL	± 0.6 %	± 0.015 mL	± 0.1 %
1 – 5 mL	0.1 mL	1 mL	± 2.5 %	± 0.025 mL	± 0.5 %
		2.5 mL	± 1 %	± 0.025 mL	± 0.2 %
		5 mL	± 0.5 %	± 0.025 mL	± 0.1 %
2 – 10 mL	0.2 mL	2 mL	± 2.5 %	± 0.05 mL	± 0.5 %
		5 mL	± 1 %	± 0.05 mL	± 0.2 %
		10 mL	± 0.5 %	± 0.05 mL	± 0.1 %
5 – 25 mL	0.5 mL	5 mL	± 2.5 %	± 0.125 mL	± 0.5 %
		12.5 mL	± 1 %	± 0.125 mL	± 0.2 %
		25 mL	± 0.5 %	± 0.125 mL	± 0.1 %
10 – 50 mL	1.0 mL	10 mL	± 2.5 %	± 0.25 mL	± 0.5 %
		25 mL	± 1 %	± 0.25 mL	± 0.2 %
		50 mL	± 0.5 %	± 0.25 mL	± 0.1 %
20 – 100 mL	2.0 mL	20 mL	± 2.5 %	± 0.5 mL	± 0.5 %
		50 mL	± 1 %	± 0.5 mL	± 0.2 %
		100 mL	± 0.5 %	± 0.5 mL	± 0.1 %

¹⁾ The data for systematic error and random error are given according to EN ISO 8655. Technical specifications are subject to change. Errors and omissions excepted.
The Varispenser (plus) is not a substitution for a bottle closure. Volatile liquids can disappear.²⁾ buttress thread

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Abs. random error ¹⁾	Thread	Bottle thread adapter incl.	Catalog No.	List USD
± 0.0025 mL	GL 32	GL 28, 45, S ²⁾ 40	4960000019	\$ 490.00
± 0.0025 mL				
± 0.0025 mL				
± 0.005 mL	GL 32	GL 28, 45, S ²⁾ 40	4960000027	490.00
± 0.005 mL				
± 0.005 mL				
± 0.01 mL	GL 32	GL 28, 45, S ²⁾ 40	4960000035	490.00
± 0.01 mL				
± 0.01 mL				
± 0.025 mL	GL 45	GL 32, 38, S ²⁾ 40	4960000043	650.00
± 0.025 mL				
± 0.025 mL				
± 0.05 mL	GL 45	GL 32, 38, S ²⁾ 40	4960000051	680.00
± 0.05 mL				
± 0.05 mL				
± 0.1 mL	GL 45	GL 32, 38, S ²⁾ 40	4960000060	1,000.00
± 0.1 mL				
± 0.1 mL				
± 0.0025 mL	GL 32	GL 28, 45, S ²⁾ 40	4961000012	520.00
± 0.0025 mL				
± 0.0025 mL				
± 0.005 mL	GL 32	GL 28, 45, S ²⁾ 40	4961000020	520.00
± 0.005 mL				
± 0.005 mL				
± 0.01 mL	GL 32	GL 28, 45, S ²⁾ 40	4961000039	520.00
± 0.01 mL				
± 0.01 mL				
± 0.025 mL	GL 45	GL 32, 38, S ²⁾ 40	4961000047	680.00
± 0.025 mL				
± 0.025 mL				
± 0.05 mL	GL 45	GL 32, 38, S ²⁾ 40	4961000055	710.00
± 0.05 mL				
± 0.05 mL				
± 0.1 mL	GL 45	GL 32, 38, S ²⁾ 40	4961000063	1,030.00
± 0.1 mL				
± 0.1 mL				



Eppendorf Top Buret



- Product features**
- > Continuous, pulse-free dispensing technology
 - > Recirculate valve with valve lever
 - > Voltage supply with long-life battery and battery status indicator
 - > Dispensing range 0.01 mL to 999.9 mL
 - > Electronic control pad can be removed as unit
 - > Service-friendly modular design incl. simple calibration program
 - > High chemical resistance
 - > Variable discharge tube, horizontal 142 – 220 mm, vertical 10 – 200 mm and rotatable by 360°
 - > Telescopic aspirating tube for automatic length adjustment of 210 – 370 mm
 - > Suitable for GL 32, GL 38, GL 45 GL and S 40 buttress thread with included adapters, additional adapters available

Description
The Eppendorf Top Buret sets standards for manual titration. With each turn of the dial liquid is continuously dispensed eliminating the need for new liquid aspiration, making titration simpler and safer. The Top Buret comes in two different models: Model M features a dispensing rate of 2,500 µL per rotation; Model H features a rate of 5,000 uL per rotation. The digital display readings on both models range from 10 µL to 999.9 mL with the size of your supply bottle being the only limiting factor. Its clearly labeled user-friendly digital display and simple knob control provides for easy, ergonomic and fatigue free operation.

Ordering information							
Volume range	Volume	Rel. systematic error ¹⁾	Abs. systematic error ¹⁾	Rel. random error ¹⁾	Abs. random error ¹⁾	Catalog No.	List USD
Top Buret M							
0.1 – 999.9 mL	2.5 mL	± 2.0 %	± 0.5 mL	± 1.0 %	± 0.025 mL	4965000017	\$1,155.00
	12.5 mL	± 0.4 %	± 0.5 mL	± 0.2 %	± 0.025 mL		
	25 mL	± 0.2 %	± 0.5 mL	± 0.1 %	± 0.025 mL		
Top Buret M							
0.1 – 999.9 mL	5 mL	± 2.0 %	± 0.1 mL	± 1.0 %	± 0.05 mL	4965000025	1,155.00
	25 mL	± 0.4 %	± 0.1 mL	± 0.2 %	± 0.05 mL		
	50 mL	± 0.2 %	± 0.1 mL	± 0.1 %	± 0.05 mL		

¹⁾ The error data, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used. Technical specifications are subject to change. Errors and omissions excepted.

i For more information go to www.eppendorf.com



Varispenser®/ Varispenser® plus and Top Buret

Accessories		
Description	Catalog No.	List USD
Bottle thread adapter from GL 32 to GL 25, PP	4960800040	\$ 20.00
Bottle thread adapter from GL 32 to GL 27, PP	4960800139	20.00
Bottle thread adapter from GL 32 to GL 28, PP	4960800058	20.00
Bottle thread adapter from GL 32 to GL 38, PP	4960800066	20.00
Bottle thread adapter from GL 32 to GL 40, PP	4960800074	20.00
Bottle thread adapter from GL 32 to GL 45, PP	4960800112	20.00
Bottle thread adapter from GL 32 to NS 19/26, PP	4960800082	20.00
Bottle thread adapter from GL 32 to NS 24/29, PP	4960800090	20.00
Bottle thread adapter from GL 32 to NS 29/32, PP	4960800104	20.00
Bottle thread adapter, from GL 32 to GL 28, ETFE	4960835005	31.00
Bottle thread adapter, from GL 32 to GL 38, ETFE	4960836001	31.00
Bottle thread adapter, from GL 32 to GL 40, ETFE	4960833002	28.70
Bottle thread adapter, from GL 32 to GL 45, ETFE	4960837008	31.00
Bottle thread adapter from GL 45 to GL 32, PP	4960800120	20.00
Bottle thread adapter from GL 45 to GL 38, PP	4960800155	20.00
Bottle thread adapter from GL 45 to S 40 (Buttress thread), PP	4960800147	20.00
Bottle thread adapter, from GL 45 to GL 38, ETFE	4960839000	31.00
Bottle thread adapter, from GL 45 to GL 40, ETFE	4960834009	31.00
Discharge tube, set, for Varispenser® plus 2.5 mL, 5 mL and 10 mL	4961826018	34.10
Discharge tube, set, for Varispenser® plus 25 mL, 50 mL and 100 mL	4961827014	37.30
Discharge tube, set, for Varispenser® 2.5 mL, 5 mL and 10 mL	4960826022	15.40
Discharge tube, set, for Varispenser® 25 mL, 50 mL and 100 mL	4960827029	16.94
Spiral discharge tube, 80 cm, for Varispenser® and Varispenser® plus, 2.5 mL, 5 mL and 10 mL	4960824003	103.00
Spiral discharge tube, 80 cm, for Varispenser® and Varispenser® plus	4960825000	103.00
Discharge tube with knurled nut, for Eppendorf Top Buret™	4965612004	54.80
Discharge valve with toggle, for Eppendorf Top Buret™	4965616000	160.00
Drying tube, without drying agent, for Eppendorf Top Buret™, Varispenser® and Varispenser® plus	4960851000	78.00
Air vent cover, for Varispenser® and Varispenser® plus	4960810274	9.10
Air vent cover/filter connection, for Eppendorf Top Buret™	4965620007	9.10
Aspiration valve with valve ball, for Varispenser® and Varispenser® plus, 2.5 mL, 5 mL and 10 mL	4960803006	40.80
Telescopic aspirating tube, for Eppendorf Top Buret™, Varispenser® and Varispenser® plus	4960805009	53.20
Tube holder, for Eppendorf Top Buret™	4965611008	29.30
Thread adapter for 5L-jerrycan from 45 mm to 17/8″ thread	4960832006	90.00
Universal wrench adapter, for Varispenser® and Varispenser® plus 100 mL	4960800171	34.60
Universal wrench, for Varispenser® and Varispenser® plus	4960800031	18.70



Pipette Performance Plans

Service that makes sense

For over 65 years Eppendorf has been an innovator and leading provider of liquid handling systems, which include pipette devices as well as consumables. This total approach philosophy extends beyond production as a manufacturer to include our quality pipette calibration, preventive maintenance, and repair services- for Eppendorf and all other major brands of pipettes. Pipettes are precision instruments. Regular maintenance and calibration of your pipettes are fundamental to their proper function, precision, and accuracy. With our Pipette Performance Plans we offer certified calibration services for all pipettes from quick economical calibration to GLP/GMP custom designed services.



- We offer quality pipette service plans in compliance with:
- > ISO 9001:2008—Ensures high quality management systems, improved customer service, and continual improvement
 - > ISO/IEC 17025:2005—Ensures our data quality and efficiency
 - > ANSI/NCSL Z540-1-1994—Ensures our calibration and verification of measurement and test equipment

The Eppendorf difference

- > Reliable, factory trained experts
- > Efficient, quality processes
- > Customized, service solutions

Procedures	QuickCheck PM SM
Internal and external inspection of pipette	■
Internal and external cleaning of pipette	■
Replacement of worn or broken parts, if needed ¹	■
Pipette calibration performed using NIST-traceable, semi-micro (0.00001g) balance	–
Number of measuring points	
single-channel, fixed-volume:	–
single-channel, adjustable-volume:	–
multichannel:	–
Individual weighing results, mean volume, inaccuracy and imprecision values	
measured:	–
recorded:	–
Calibration label applied to pipette	–
Data supplied via comprehensive individual unit report	–
Data supplied via comprehensive multi-unit report	–
Service Center (manual or electronic pipette)	Catalog No.
Single-channel	901510186
8-channel	901510187
12-channel	901510187
On-site Service (manual or electronic pipette)	Catalog No.
Single-channel	901510196
8-channel	901510197
12-channel	901510197

¹ Please inquire with our customer service department for on-site service. Spare parts at an additional cost if needed. Please note that there will be a \$12 fee for units returned without repair and/or discarded upon customer request. ² ISO/IEC 17025 accreditation only pertains to calibration services, not to cleaning, inspection, or part replacement.



Service Center

Our mail in program is processed at our state of the art facility to ensure accuracy and traceability of your instruments. Our professional staff has been factory trained to ensure maximum efficiency, product knowledge and customer service. It’s fast and easy to send us your pipettes for calibration and repair. Visit our online epExpress Pipette Service Center at www.eppendorf-us.com/calibration. Here you can complete our online Service Authorization Form and get a real-time quotation based on your specific calibration service requirements.



On-Site Service

Our on-site program provides all the benefits we provide with our mail in program, but we process your pipettes at your facility! Our competent technicians deliver the same thorough quality service in the environment in which the pipettes are used.

Get started today at: www.eppendorf-us.com/calibration

Advantage Calibration	Advantage Clinical	Advantage Certification	ISO 17025 Accredited Service	GLP/GMP Custom Calibration
■	■	■	■ ²⁾	■
■	■	■	■ ²⁾	■
■	■	■	■ ²⁾	■
■	■	■	■	■
8	9	8	As requested, based on customer requirements for “as found” and “as returned”	As requested, based on customer requirements; may include “as found” data
4 low/4 high	3 low/3 medium/ 3 high	4 low/4 high		
1 reading per channel low/high	1 reading per channel low/medium/high	1 reading per channel low/high		
■	■	■	■	■
–	■	■	■	■
■	■	■	■	■
–	–	■	■	■
–	■	–	–	–
Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.
901510194	901510313	901510190	Please inquire	Please inquire
901510195	901510315	901510191	Please inquire	Please inquire
901513516	901513524	901513522	Please inquire	Please inquire
Catalog No.	Catalog No.	Catalog No.	Catalog No.	Catalog No.
901510184	901510317	901510180	Please inquire	Please inquire
901510185	901510307	901510181	Please inquire	Please inquire
901513514	901510177	901513520	Please inquire	Please inquire



Model	epMotion® 96	epMotion® 5070	epMotion® 5070f	epMotion® 5073I
	For labs seeking to increase the throughput of their 96 and 384 well based assays	For laboratories seeking to explore the benefits of automation	For laboratories seeking to explore the benefits of automation inside a hood	Versatile solution for automating DNA extraction and other applications
Page	90	94	94	96
Dimensions (W x D x H)	9 x 18 x 21 in / 22.9 x 45.7 x 53.3 cm	26 x 19 x 25 in / 65 x 48 x 63 cm	26 x 19 x 25 in / 65 x 48 x 63 cm	26 x 24 x 27 in / 65 x 61 x 67 cm
Weight w/o accessories	19 kg	45 kg	33 kg	50 kg
Max. power consumption	175 W	150 W	150 W	600 W
Optical confocal infrared detector	Mechanical sensor for tip size verification	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools
SLAS/ANSI positions	1	4 (plus 3 virtual positions)	4 (plus 3 virtual positions)	6
Random measurement error	–	±0.1 mm	±0.1 mm	±0.1 mm
Systematic measurement error	–	±0.3 mm	±0.3 mm	±0.3 mm
Gripper option	no	no	no	yes
Thermal module(s)	no	no	no	1
ThermoMixer upgrade option	no	no	no	no
Magnetic separation	no	no	no	with third party adapter and gripper
Vacuum separation	no	no	no	no
Automatic tool exchange	n/a	2 tools	2 tools	2 tools and gripper
UV/HEPA option	no	no	no	yes
MagSep reagents for DNA/RNA purification	no	no	no	no
For operation in biosafety cabinet	yes	no	yes	no



epMotion® 5073m	epMotion® 5075I	epMotion® 5075v	epMotion® 5075t	epMotion® 5075m
Versatile solution for automating DNA extraction and other applications	The most versatile solution to fully automate processes	The most versatile solution to fully automate processes	The most versatile solution to fully automate processes	The most versatile solution to fully automate processes
98	100	106	102	104
26 x 24 x 27 in / 65 x 61 x 67 cm	43 x 24 x 27 in / 107 x 61 x 67 cm	43 x 24 x 27 in / 107 x 61 x 67 cm	43 x 24 x 27 in / 107 x 61 x 67 cm	43 x 24 x 27 in / 107 x 61 x 67 cm
57 kg	85 kg	86 kg	87 kg	88 kg
600 W	700 W	700 W	700 W	700 W
Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools	Contact-free recognition of fill level and identification of labware, tip types, quantities, and tools
6	15	12	14.5	14.5
±0.1 mm	± 0.1 mm	± 0.1 mm	± 0.1 mm	±0.1 mm
±0.3 mm	± 0.3 mm	± 0.3 mm	± 0.3 mm	±0.3 mm
yes	yes	included	yes	yes
no	3	3	2	2
included	available	available	included	included
yes	with third party adapter and gripper	with third party adapter and gripper	with third party adapter and gripper	yes
no	no	yes	no	no
2 tools and gripper	4 tools and gripper	4 tools and gripper	4 tools and gripper	4 tools and gripper
yes	yes	yes	yes	yes
yes	no	no	no	yes
no	no	no	no	no

epMotion® 96



- 1. **Compact design** - Small footprint, fits under laminar flow hood and can be easily moved in between labs
- 2. **Control unit (Apple® iPod®)** - High quality touch screen for convenient system control. Accessible by other iOS® 7 devices (iPhone®, iPad®) via WiFi
- 3. **Loading frame** - For quick exchange of epT.I.P.S.® Motion reload tip trays
- 4. **Lifting table** - Supports a variety of SBS-size labware such as micro plates, reservoirs, and Thermoadapters. 384 well plates can be pipetted by indexing
- 5. **Manually lift plates up and lock in place** - Easy/fast adjustments to different labware heights and filling levels
- 6. **Tip attachment lever** - Minimal force needed uniformly to attach tips to the 96 nose-cone array for ergonomic operation
- 7. **Auto-detect function for tip size** - Verification between 50 and 300 µL tips allows for more accurate volume settings and better pipetting performance
- 8. **Height adjustment** - Possibility to pre-set labware height for repetitive tasks or auto-pipetting mode
- 9. **Accessory plate** - for handling 384 well plates by indexing with the lifting table



Fast and easy positioning of labware via adjustable lifting table



Stacking of plates accelerates filling of multiple 96-well plates

Description

The Eppendorf epMotion 96 is a semi-automated electronic pipette for fast and precise parallel 96 channel microplate processing. It is an easy to use bench top system for high precision pipetting in 96 and 384 well plates. Without changes to the system, a large volume range of 0.5 µL to 300 µL is available for convenient use over a range of applications. Its ergonomic design and intuitive handling makes the epMotion 96 a great tool for anyone in the lab who needs fast and precise liquid handling in 96 format.

Applications

- > Replication and reformatting of microplates
- > Cell seeding and media change
- > Reagent and compound addition
- > 384 wells by 4 times 96 well pipetting
- > Cell-based assays
- > ELISA handling (plate coating & washing)
- > Biochemical assays

Product features

- > Pipette from 0.5 µL to 300 µL with one system
- > Electronic pipetting with synchronous 96 channel piston movement for better precision and reproducibility of results
- > Auto-detect function for tip size
- > Use 50 µL and 300 µL reload tips for best accuracy
- > Intuitive and industry proven software concept and convenient touch screen control
- > Intelligent, preset applications: aspiration, dilution, multi dispense, pipette and mix
- > Individual speed setting, set parameters you are comfortable with and that match the liquid class
- > Easy and rapid tip loading and reloading
- > Compact design to fit under the laminar flow hood
- > Reduced risk of repetitive stress injury (RSI)



epMotion® 96



Intuitive Operation
Insert tips for required volume range; select mode of action;
move plate to tips; touch for aspirate or dispense

Technical specifications	
Volume range	0.5 – 300 µL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	175 W
Dimensions (W × D × H)	9 × 18 × 21 in / 22.9 × 45.7 × 53.3 cm
Weight w/o accessories	42 lb / 19 kg
Automatic tool exchange	n/a
Dispensing tool	
Random measurement error (1 µL with 50 µL tips)	≤ 3 %
Systematic measurement error (1 µL with 50 µL tips)	± 2 %
Random measurement error (10 µL with 300 µL tips)	≤ 3 %
Systematic measurement error (10 µL with 300 µL tips)	± 2 %
Compatibility with biosafety cabinet	yes
Gripper option	no
Vacuum separation	no
Magnetic separation	no
Operation	electronic
Thermal module(s)	no
Pipetting type	air-cushion
SLAS/ANSI deck positions	1
ThermoMixer upgrade option	no
UV/HEPA option	no
Modes:	Pipette: Aspiration and dispensing of liquids Multidispense: Dispensing of liquid in multiple equal volumes Pipette + Mix: Aspiration and dispensing followed by user defined mixing cycles Manual Pipette: Aspiration of liquid can be manually stopped prior to reaching the max set volume; used for volume determination or gentle aspiration of supernatants Dilute + Mix: Aspiration of a concentrate and a diluent separated by an air gap. Mix after dispensing Multiaspirate: Aspiration of multiple equal liquid volumes; used for pooling from multiple plates Programming: Store sequences of multiple modes as programmed workflows
Pipetting technology	96 channel air displacement



Convenient touch control for quick programming



Easy selection of pipetting parameters

Ordering information		
Description	Catalog No.	List USD
epMotion® 96, semi-automated electronic pipette for parallel 96 channel microplate processing ,(without iPod® controller), 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 0.5 – 300 µL	5069000012	Inquire
iPod® touch controller, (for use with epMotion® 96), 16 GB, blue	960002580	Inquire
epT.I.P.S.® Motion Reload Tips		
Eppendorf Quality™, 50 µL, 2304 tips (24 trays x 96 tips)	0030014421	\$204.00
Eppendorf Quality™, 300 µL, 2304 tips (24 trays x 96 tips)	0030014464	204.00
epT.I.P.S.® Motion Reload Tips, with filter		
PCR clean, 50 µL, 2304 tips (24 trays x 96 tips)	0030014430	406.00
PCR clean and sterile, 50 µL, 2304 tips (24 trays x 96 tips)	0030014529	466.00
PCR clean, 300 µL, 2304 tips (24 trays x 96 tips)	0030014472	406.00
PCR clean and sterile, 300 µL, 2304 tips (24 trays x 96 tips)	0030014537	466.00
Thermoadapter for PCR, for temperature control of PCR plates		
384 wells, skirted	960002202	Inquire
96 wells, skirted	960002199	Inquire



epMotion® 5070 and 5070f



Description

epMotion 5070 is the most compact solution for accurate and reproducible automated pipetting. It is a perfect match for routine applications, such as serial dilutions, reagent distribution, sample transfer from tube to plate and sample normalization.

Due to its excellent pipetting accuracy the epMotion is the recommended solution for real-time PCR - resulting in excellent reproducibility and enabling setup with less reagent volume lowering costs per reaction. Its pipetting technology is based on the classic Eppendorf piston-stroke pipettes; thus, manual protocols are easily transferred to epMotion 5070. A wide range of compatible consumables allows established procedures to be maintained. Before every run the optical sensor checks the tip type and quantity, fill level of all vessels, and the identity of the deck-installed labware.

Applications

- > Serial dilutions
- > Reagent distribution
- > Assay set-up
- > Sample transfer from tubes to plates
- > Reformatting into plates
- > PCR and real-time PCR setup
- > Cell-based assay set-up
- > Immunoassay set-up
- > Media change for cell cultures

Product features

- > 4 ANSI/SLAS worktable and 3 virtual positions
- > Pipetting range from 1 µL to 1,000 µL
- > Compatible with micro- and PCR plates up to 384 wells
- > Compatible with 0.2 mL to 50 mL tubes
- > Optical sensor*1 provides contact-free tool and liquid detection
- > Available MultiCon touch, mouse, and keyboard PC controller
- > Safety hood with monitored front door
- > Automatic exchange of pipetting tools
- > User guided LH assistant for general liquid handling tasks
- > Virtual positions that allow for programming additional labware

Special features for epMotion 5070f

- > Compatible with most laminar flow hoods
- > Innovative light barrier safety lock technology
- > Pre-programmed cell culture labware
- > Sterile pipet tips available
- > Autoclavable pipetting tools

*1 Patent US 6,819,437 B2

i For more information go to www.eppendorf.com



epMotion 5070f was especially designed without outer housing for improved air flow inside laminar flow benches.



5070f integrated in laminar flow cell bench. The built-in light barrier beam monitors that the sash is closed for safe operation.

Technical specifications		
Model	epMotion® 5070	epMotion® 5070f
Volume range	1 µL – 1 mL	1 µL – 1 mL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	150 W	150 W
Dimensions (W x D x H)	26 x 19 x 25 in / 65 x 48 x 63 cm	26 x 19 x 25 in / 65 x 48 x 63 cm
Weight w/o accessories	99.2 lb / 45 kg	72.8 lb / 33 kg
Conductor – X, Y, Z Positioning		
Random measurement error	±0.1 mm	±0.1 mm
Systematic measurement error	±0.3 mm	±0.3 mm
Detector		
Optical confocal infrared detector	Contact-free recognition of fill level, inserted tools, labware, tip types and quantities	Contact-free recognition of fill level, inserted tools, labware, tip types and quantities
Dispensing tool ¹⁾²⁾		
Random measurement error (1 µL)	≤ 5 %	≤ 5 %
Systematic measurement error (1 µL)	±15 %	±15 %
Random measurement error (1,000 µL)	≤ 0.15 %	≤ 0.15 %
Systematic measurement error (1,000 µL)	±0.7 %	±0.7 %
Random measurement error (50 µL)	≤ 0.4 %	≤ 0.4 %
Systematic measurement error (50 µL)	±1.2 %	±1.2 %
Operation	electronic	electronic
Pipetting type	air-cushion	air-cushion
SLAS/ANSI deck positions	4 plus 3 virtual positions	4 plus 3 virtual positions

¹⁾ in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C ²⁾ See Eppendorf Application Note 168 for typical pipetting performance



epMotion® 5073l



Description

The epMotion 5073 is a flexible system for automating time consuming and complex pipetting procedures. The epBlue software makes programming new protocols easier then ever. The EasyCon controller comes pre-loaded with a PCR Assistant providing step-by-step guidance through various protocols. The high accuracy of the epMotion 5073 makes all pipetting procedures more precise, reproducible and fully standardized, resulting in the highest quality data. The epMotion P5073 bundle package includes all accessories required for preparing PCR samples; only consumables need to be ordered separately.

Applications

- > PCR set-up
- > Serial dilution and normalization of samples
- > Sample or reagent transfer
- > Sample mixing and tempering
- > Assay set-up
- > Media change and other cell culture applications

Product features

- > 6 ANSI/SLAS microplate positions
- > Compact control tablet with touchscreen or mouse operation, USB data transfer
- > Software assistants for simple, step-by-step application programming
- > Optical sensor*1 for detecting liquids, labware, tips
- > Automatic replacement of 2 pipetting tools
- > Volume range of 1 to 1,000 µL for maximum pipetting accuracy
- > Compatible with tubes (0.1 to 50 mL) and microplates with up to 384 wells
- > Calibrated 1-channel and 8-channel pipetting tools
- > Optional UV lamp and HEPA filter system for decontamination and clean air conditions
- > Fully enclosed, compact housing with door lock
- > Optional MultiCon touch PC controller with mouse and key board. Thermal module for heating or cooling of samples or reagents.

*1 US patent 6,819,437 B2

i For more information go to www.eppendorf.com



More flexibility

The 6 positions of the epMotion® 5073 systems, automatic change between 2 tools, and gripper option open up a wide variety of applications.



Simple and fast operation via software assistants

Easily create PCR mastermixes and dilution series for quantification standards, normalization of sample concentrations and setting up PCR reactions – using touchscreen or mouse operation.

Technical specifications		
Model	epMotion 5073l/P5073	epMotion 5073l with CleanCap
Noise level	~ 56 dB(A)	~ 56 dB(A) HEPA off
Volume	1 µL–1 mL	1 µL–1 mL
Power supply	100–240 V ± 10%, 50/60 Hz ± 5%	100–240 V ± 10%, 50/60 Hz ± 5%
Max. power consumption	600 W	600 W
Dimensions (W x D x H)	65 x 61 x 67 cm / 26 x 24 x 27 in	65 x 61 x 77 cm / 26 x 24 x 31 in
Weight w/o accessories	50 kg / 110.2 lb	55 kg / 121.3 lb
Conductor—X, Y, Z Positioning	same as 5075 models	same as 5075 models
Gripper carrying capacity	1,200 g	1,200 g
HEPA filter		E 10
Filter class according to EN 1822		
Volume flow		70–80 m³/h
UV lamp		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3.9 W
Main wavelength		254 nm (UV-C)
Dispensing tool ^{1,2}		
Random measurement error (1 µL)	≤ 5%	≤ 5%
Systematic measurement error (1 µL)	± 15%	± 15%
Random measurement error (1,000 µL)	≤ 0.15%	≤ 0.15%
Systematic measurement error (1,000 µL)	± 0.7%	± 0.7%
Random measurement error (50 µL)	≤ 0.4%	≤ 0.4%
Systematic measurement error (50 µL)	± 1.2%	± 1.2%
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	6	6
Thermal module (optional)		
Cooling rate	4°C/min	4°C/min
Heating rate	9°C/min	9°C/min
Temperature range	0°C–110°C	0°C–110°C

¹ In pipetting mode, free jet, without pre-wetting, with distilled water, at 20°C. ² See Eppendorf Application Note 168 for typical pipetting performance.



epMotion® 5073m



Description
The epMotion 5073m is 2 systems in one. First, a customized system for automated nucleic acid purification of 1 to 24 samples using the MagSep reagent kits. The Eppendorf EasyCon tablet and Prep Assistant software provide simple operation with step-by-step guidance through the process. Secondly, a flexible system for automating time-consuming and complex pipetting procedures with the epBlue software, making routine liquid handling tasks easier than ever. The pipetting procedure is more precise, reproducible and fully standardized, making your workplace more ergonomic and safer. The epMotion M5073 bundle package includes all accessories required for nucleic acid purification; consumables sold separately.

- Product features**
- > Optical sensor*1 for detecting liquids, labware, and tips
 - > Volume range of 1 µL to 1,000 µL for maximum versatility
 - > Optional UV lamp and HEPA filter system for sterilization and clean air conditions.
 - > Calibrated 1- channel and 8- channel pipetting tools
 - > Software assistants for simple, step-by-step application programming
 - > Automatic replacement of 2 pipetting tools and gripper
 - > Compact control tablet with touchscreen or mouse controls and USB data transfer
 - > 6 ANSI/SBS worktable positions
 - > 3D MagSep technology; mixing, temperature control, and magnetic separation in one location
 - > Compatible with micro-plates of up to 384 wells and 0.2 mL to 50 mL tubes

*1 US patent 6,819,437 B2

- Applications**
- > DNA and RNA purification
 - > PCR set-up
 - > Sample or reagent transfer
 - > Sample mixing and tempering
 - > Assay set-up
 - > Media change and other cell culture applications

i For more information go to www.eppendorf.com



3D MagSep technology - Unique combination of magnet finger module and Eppendorf Thermomixer allow you to separate, mix and temperature control at one position.



MagSep reagent kits are optimized for use with epMotion® 5073m/M5073 and 5075m to automatically purify nucleic acids from biological samples.

Technical specifications		
Model	epMotion® 5073m/M5073	epMotion 5073m with CleanCap
Volume	1 µL–1 mL	1 µL–1 mL
Power supply	100–240 V ± 10%, 50/60 Hz ± 5%	100–240 V ± 10%, 50/60 Hz ± 5%
Max. power consumption	600 W	600 W
Dimensions (W × D × H)	65 × 61 × 67 cm / 26 × 24 × 27 in	65 × 61 × 77 cm / 26 × 24 × 31 in
Weight w/o accessories	57 kg / 125.6 lb	62 kg / 136.7 lb
Conductor—X, Y, Z Positioning	same as 5075 models	same as 5075 models
Gripper carrying capacity	1,200 g	1,200 g
HEPA filter		
Filter class according to EN 1822		E 10
Volume flow		70–80 m³/h
UV lamp		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3.9 W
Main wavelength		254 nm (UV-C)
Dispensing tool ^{1,2}		
Random measurement error (1 µL)	≤ 5%	≤ 5%
Systematic measurement error (1 µL)	± 15%	± 15%
Random measurement error (1,000 µL)	≤ 0.15%	≤ 0.15%
Systematic measurement error (1,000 µL)	± 0.7%	± 0.7%
Random measurement error (50 µL)	≤ 0.4%	≤ 0.4%
Systematic measurement error (50 µL)	± 1.2%	± 1.2%
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	6	6
Thermomixer		
Max. load	1,000 g (2.2 lb)	1,000 g (2.2 lb)
Mixing period	5 s–120 min	5 s–120 min
Speed	300 rpm–2,000 rpm	300 rpm–2,000 rpm
Temperature range	4°C–95°C	4°C–95°C

¹ In pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C. ² See Eppendorf Application Note 168 for typical pipetting performance.

Only for epMotion 5073m and M5073c: Limited Use Label License
Notice to purchaser; limited license for research use only
This product and its use may be covered by one or more patents owned by Gen-Probe Incorporated. The purchase price for this product includes only limited, nontransferable rights under certain claims of certain patents owned by Gen-Probe Incorporated to use this product for research purposes only. No other rights are conveyed. Purchaser is not granted any rights under patents of Gen-Probe Incorporated to use this product for any commercial use. Further information regarding purchasing a license under patents of Gen-Probe Incorporated to use this product for any other purposes, including, without limitation, for commercial use, may be obtained by contacting Gen-Probe Incorporated, Attn: Business Development Department, 10210 Genetic Center Drive, San Diego, California 92121-4362, U.S.A.



epMotion® 5075I



Description

The epMotion 5075 is the perfect solution for more complex pipetting tasks. It offers the same precision and accuracy as the epMotion 5070, making it the ideal tool for demanding applications such as the purification of nucleic acids with magnetic beads, or routine applications with several plates. With 15 working positions, automatic changing of pipetting tools, and the plate gripper, the epMotion 5075I is one of the most flexible automated liquid handling systems.

Applications

- > NGS library preparation
- > Distributing reagents & serial dilutions
- > Sample transfer from individual tubes to plates
- > Reformatting plates
- > Media change and other cell culture applications
- > Sample pooling
- > Real-time PCR set-up
- > Cell-based assay set-up
- > Immunoassay set-up
- > Setting concentrations or volumes

Product features

- > 15 ANSI/SLAS worktable positions
- > Maximum pipetting accuracy from 1 µL to 1,000 µL
- > Automatic exchange of tools (gripper, 1-channel & 8-channel)
- > Optical sensor*1 for detecting liquids, labware, tips
- > Compatible with 0.2 mL to 50 mL tubes and microplates with up to 384 wells
- > Eppendorf MultiCon PC controller to run preinstalled LH assistant or epBlue software by touch or mouse
- > Optional software extensions for handling samples with barcodes or for integration to LIMS and ELN
- > Optional software extensions for integration to regulated process environments (GLP, GMP, 21 CFR)
- > CleanCap option – UV lamp & HEPA filter for decontamination and clean air conditions
- > Up to 3 thermal modules are available for heating or cooling (0–110 °C) of samples or reagents

*1 Patent US 6,819,437 B2

i For more information go to www.eppendorf.com



Large deck space gives you all the flexibility you need for your application.



epMotion MultiCon is a powerful all-in-one touch-screen PC that enables the use of the 3D run simulation feature. The MultiCon also allows upgrading to the epBlue™ ID barcode tracking or the epBlue GxP 21 CFR part 11 compliant software.

Technical specifications		
Model	epMotion 5075I	epMotion 5075I with CleanCap
Noise level	~ 56 dB(A)	~ 56 dB(A) HEPA off
Volume	1 µL–1 mL	1 µL–1 mL
Power supply	100–240 V ± 10%, 50/60 Hz ± 5%	100–240 V ± 10%, 50/60 Hz ± 5%
Max. power consumption	700 W	700 W
Dimensions (W × D × H)	107 × 61 × 67 cm / 43 × 24 × 27 in	107 × 61 × 77 cm / 43 × 24 × 30.1 in
Weight w/o accessories	85 kg / 187.4 lb	91.7 kg / 208.5 lb
Conductor—X, Y, Z Positioning		
Random measurement error	± 0.1 mm	± 0.1 mm
Systematic measurement error	± 0.3 mm	± 0.3 mm
Detector		
Optical confocal infrared detector	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
Gripper carrying capacity	1,200 g	1,200 g
HEPA filter		
Filter class according to EN 1822		E 10
Volume flow		70–80 m³/h
UV lamp		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3.9 W
Main wavelength		254 nm (UV-C)
Dispensing tool ^{1,2}		
Random measurement error (1 µL)	≤ 5%	≤ 5%
Systematic measurement error (1 µL)	± 15%	± 15%
Random measurement error (1,000 µL)	≤ 0.15%	≤ 0.15%
Systematic measurement error (1,000 µL)	± 0.7%	± 0.7%
Random measurement error (50 µL)	≤ 0.4%	≤ 0.4%
Systematic measurement error (50 µL)	± 1.2%	± 1.2%
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	15	15

¹ In pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C. ² See Eppendorf Application Note 168 for typical pipetting performance.



epMotion® 5075t



Description

The epMotion 5075t includes an integrated Thermomixer module to mix, heat or cool samples and reagents. The module can be loaded and unloaded with the gripper and pipetting to the mixer is possible before and after mixing steps. The Thermomixer module is fully software controlled enabling pipetting onto other worktable positions while the mixer is in operation.

Product features

- > All the features of the epMotion 5075i, plus
- > Integrated Eppendorf ThermoMixer® with 2D Mix-Control technology
- > Temperature control range 15 °C below RT to 95 °C
- > Automatic fixing of labware for mixing up to 2000 rpm
- > Pipetting at other positions during shaking
- > 14.5 deck positions, 14 SLAS/ANSI plus position for special reagent reservoir rack (3 reservoirs)
- > 2 thermal module options

Applications

- > Like 5075i, plus
- > Bead applications with mixing and tempering
- > Sequencing and PCR clean-up
- > Nucleic acid purification
- > Cell disruption
- > Immunoassays
- > NGS library preparation

i For more information go to www.eppendorf.com



Large deck space gives you all the flexibility you need for your application.



The outstanding 2D Mix-Control technology mixes liquids in a controlled, circular movement. The lack of splashing enables mixing without lid wetting or cross contamination.

Technical specifications		
Model	epMotion 5075t	epMotion 5075t with CleanCap
Noise level	~ 56 dB(A) Mixer off	~ 56 dB(A) HEPA off, Mixer off
Volume	1 µL–1 mL	1 µL–1 mL
Power supply	100–240 V ± 10%, 50/60 Hz ± 5%	100–240 V ± 10%, 50/60 Hz ± 5%
Max. power consumption	700 W	700 W
Dimensions (W × D × H)	107 × 61 × 67 cm / 43 × 24 × 27 in	107 × 61 × 77 cm / 43 × 24 × 30.1 in
Weight w/o accessories	87 kg / 191.8 lb	93.7 kg / 212.9 lb
Conductor—X, Y, Z Positioning		
Random measurement error	± 0.1 mm	± 0.1 mm
Systematic measurement error	± 0.3 mm	± 0.3 mm
Detector		
Optical confocal infrared detector	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
Gripper carrying capacity	1,200 g	1,200 g
HEPA filter		
Filter class according to EN 1822		E 10
Volume flow		70–80 m³/h
UV lamp		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3.9 W
Main wavelength		254 nm (UV-C)
Dispensing tool ^{1,2}		
Random measurement error (1 µL)	≤ 5%	≤ 5%
Systematic measurement error (1 µL)	± 15%	± 15%
Random measurement error (1,000 µL)	≤ 0.15%	≤ 0.15%
Systematic measurement error (1,000 µL)	± 0.7%	± 0.7%
Random measurement error (50 µL)	≤ 0.4%	≤ 0.4%
Systematic measurement error (50 µL)	± 1.2%	± 1.2%
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	14.5	14.5
Thermomixer		
Max. load	1,000 g (2.2 lb)	1,000 g (2.2 lb)
Mixing period	5 s–120 min	5 s–120 min
Speed	300 rpm–2,000 rpm	300 rpm–2,000 rpm
Temperature range	4°C–95°C	4°C–95°C

¹ In pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C. ² See Eppendorf Application Note 168 for typical pipetting performance.



epMotion® 5075m



Description

The epMotion 5075m is the most flexible member of the epMotion family of automated pipetting systems. With the large number of deck positions and mixing, temperature control and magnetic bead separation abilities its ideally suited for various applications in the lab.

Applications

- > Like 5075i, plus
- > Bead applications with mixing and tempering
- > Sequencing and PCR clean-up
- > Nucleic acid purification
- > Cell disruption
- > Immunoassays
- > NGS library preparation

Product features

- > All the features of the epMotion 5075t, plus
- > Combination of magnetic finger module and Eppendorf ThermoMixer®
- > Dedicated MagSep reagent kits for nucleic acid purification from 1–24 samples
- > 3 x Prep assistants for user guided automation of nucleic acid purification with MagSep kits
- > 4 x PCR assistants to streamline PCR set-up workflow
- > 3 thermal module options for heating or cooling of samples or reagents
- > CleanCap option- UV lamp and HEPA filtration for decontamination and clean air conditions

i For more information go to www.eppendorf.com



Large deck space gives you all the flexibility you need for your application.



3D MagSep technology - Unique combination of magnet finger module and TMX Thermomixer allow you to separate, mix and temperature control at one position. Ideal for use with Eppendorf MagSep nucleic acid purification kits.

Technical specifications		
Model	epMotion 5075m	epMotion 5075m with CleanCap
Noise level	~ 56 dB(A) Mixer off	~ 56 dB(A) HEPA off, Mixer off
Volume	1 µL–1 mL	1 µL–1 mL
Power supply	100–240 V ± 10%, 50/60 Hz ± 5%	100–240 V ± 10%, 50/60 Hz ± 5%
Max. power consumption	700 W	700 W
Dimensions (W x D x H)	107 x 61 x 67 cm / 43 x 24 x 27 in	107 x 61 x 77 cm / 43 x 24 x 30.1 in
Weight w/o accessories	88 kg / 194 lb	94.7 kg / 215.2 lb
Conductor—X, Y, Z Positioning		
Random measurement error	± 0.1 mm	± 0.1 mm
Systematic measurement error	± 0.3 mm	± 0.3 mm
Detector		
Optical confocal infrared detector	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities	Contact-free recognition of fill level of inserted tools, labware, tip types and quantities
Gripper carrying capacity	1,200 g	1,200 g
HEPA filter		
Filter class according to EN 1822		E 10
Volume flow		70–80 m³/h
UV lamp		
Irradiation period per run		15 min
Radiation capacity at a distance of 1 m		39 µW/cm²
Radiation capacity after 100 h		3.9 W
Main wavelength		254 nm (UV-C)
Dispensing tool ^{1,2}		
Random measurement error (1 µL)	≤ 5%	≤ 5%
Systematic measurement error (1 µL)	± 15%	± 15%
Random measurement error (1,000 µL)	≤ 0.15%	≤ 0.15%
Systematic measurement error (1,000 µL)	± 0.7%	± 0.7%
Random measurement error (50 µL)	≤ 0.4%	≤ 0.4%
Systematic measurement error (50 µL)	± 1.2%	± 1.2%
Pipetting type	air-cushion	air-cushion
SBS/ANSI deck positions	14.5	14.5
Thermomixer		
Max. load	1,000 g (2.2 lb)	1,000 g (2.2 lb)
Mixing period	5 s–120 min	5 s–120 min
Speed	300 rpm–2,000 rpm	300 rpm–2,000 rpm
Temperature range	4°C–95°C	4°C–95°C

¹ In pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C. ² See Eppendorf Application Note 168 for typical pipetting performance.



epMotion® 5075v



Description

The epMotion 5075v is all about productivity. With its integrated vacuum station the epMotion 5075v allows true walk-away automation of purification protocols that rely on vacuum filtration. The adjustable vacuum manifold can accommodate most kits from leading suppliers.

Applications

- > Like 5075I with vacuum purification technologies
- > Solid phase extraction
- > Filtration
- > DNA from blood, tissue and cells
- > DNA from plants and bacteria
- > Sequencing and PCR clean-up
- > Total RNA isolation

Product features

- > All the features of the epMotion 5075I, plus
- > 12 SLAS/ANSI deck positions
- > Integrated vacuum pump – silent operation, no tubing, wiring, or reservoirs to maintain
- > Vacuum station fully integrated that automatically adapts software to defined filter plates and adapters
- > CleanCap option – UV lamp & HEPA filter for decontamination and clean air conditions
- > Gripper for plate & labware transport
- > Up to 3 optional thermal modules (2 in case of 5075vt)
- > Available with an integrated Eppendorf ThermoMixer and vacuum station (epMotion 5075vt)

Special features for epMotion 5075vt

- > Integrated Eppendorf Thermomixer with ^{2D}Mix-Control technology
- > Temperature control range RT –15 °C to 95 °C
- > Automatic securing of labware for mixing at up to 2000 rpm

i For more information go to www.eppendorf.com



Integrated Vacuum Station - Silent operation of internal pump with no need for extra tubes, wiring, or reservoir maintenance.



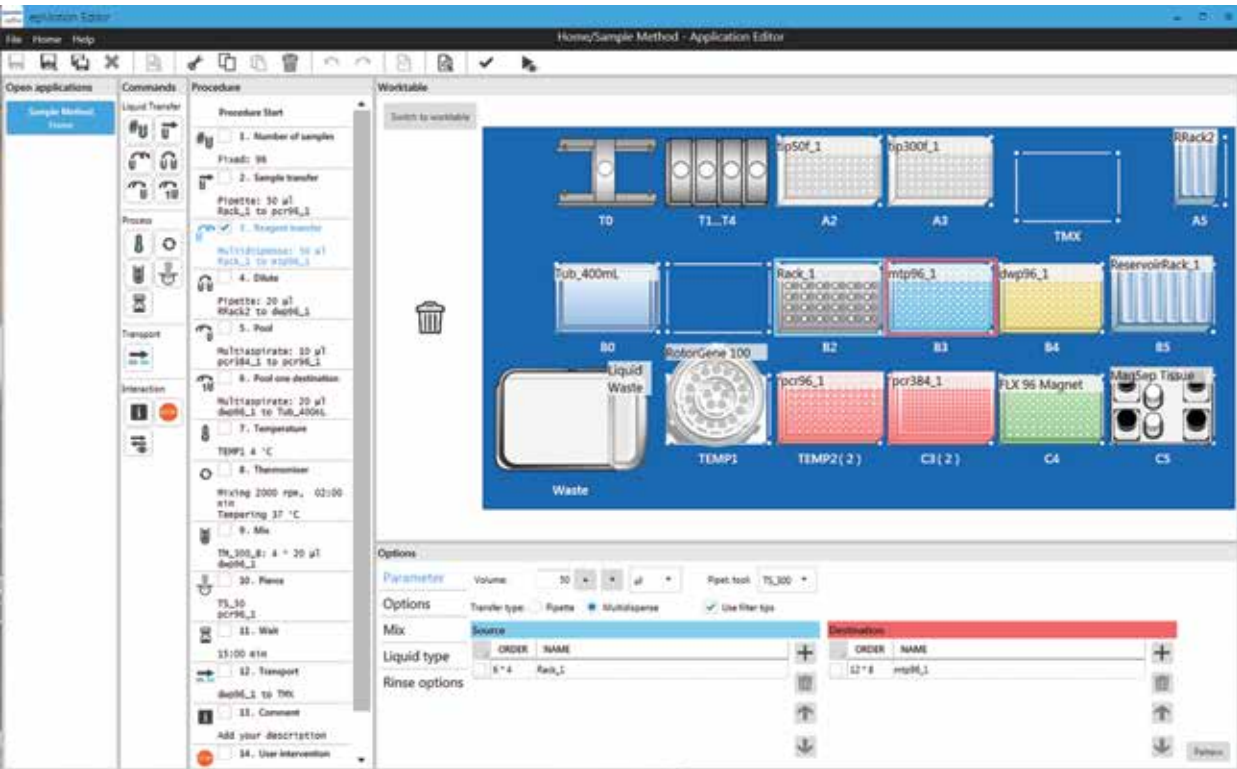
Vacuum station automatically adapts to the filter plate type. Gripper loads and unloads plates. Also available as 5075vt with integrated Eppendorf ThermoMixer.

Technical specifications		
Model	epMotion® 5075v	epMotion® 5075vt
Volume range	1 µL – 1 mL	1 µL – 1 mL
Power supply	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %	100 – 240 V ±10 %, 50 – 60 Hz ± 5 %
Max. power consumption	700 W	700 W
Dimensions (W x D x H)	43 x 24 x 27 in / 107 x 61 x 67 cm	43 x 24 x 27 in / 107 x 61 x 67 cm
Weight w/o accessories	189.6 lb / 86 kg	198.4 lb / 90 kg
Conductor – X, Y, Z Positioning		
Random measurement error	±0.1 mm	±0.1 mm
Systematic measurement error	±0.3 mm	±0.3 mm
Detector		
Optical confocal infrared detector	Contact-free optical sensor for detecting liquid levels, labware, and tips	Contact-free optical sensor for detecting liquid levels, labware, and tips
Dispensing tool ¹⁾²⁾		
Random measurement error (1 µL)	≤ 5 %	≤ 5 %
Systematic measurement error (1 µL)	±15 %	±15 %
Random measurement error (1,000 µL)	≤ 0.15 %	≤ 0.15 %
Systematic measurement error (1,000 µL)	±0.7 %	±0.7 %
Random measurement error (50 µL)	≤ 0.4 %	≤ 0.4 %
Systematic measurement error (50 µL)	±1.2 %	±1.2 %
Gripper carrying capacity	1,200 g	1,200 g
Operation	electronic	electronic
Pipetting type	air-cushion	air-cushion
SLAS/ANSI deck positions	12	12
Vacuum unit		
Vacuum max. output	35 NL/min	35 NL/min
Suction range	0.1-85 kPa	0.1-85 kPa
Suction time	1 sec to 36 min	1 sec to 36 min

¹⁾ in pipetting mode, free jet, without pre-wetting, with distilled water, at 20 °C ²⁾ See Eppendorf Application Note 168 for typical pipetting performance



Software Capabilities and Programming



Description

The epBlue™ software features an intuitive interface that allows for fast mastery and rapid method design while maintaining versatility and usability. The easy to use drag and drop visual interface makes setting up new methods fast and simple. A variety of commands are available each with its own set of preset parameters that the user can modify to fit particular needs. Commenting gives the option to leave notes when multiple users work on the same protocol. Features such as the ability to reuse tips and multidispense mode minimize tip use reducing the per sample costs. The optional barcoding tool allows for easy tracking of samples throughout your whole process.

Application support

Get up and running quickly even with the most complex protocols by utilizing our optional expert application support. Over 1400 labware definitions from a large array of manufacturers and the ability to customise new labware allows the epMotion to work with a large array of protocols.

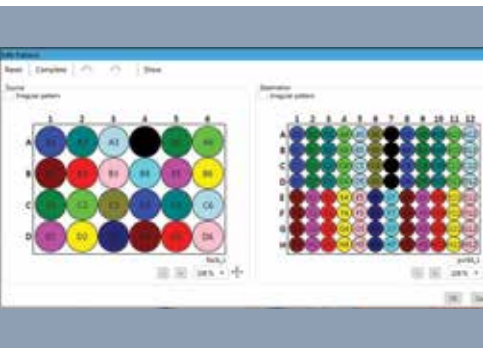
Product features

- > Intuitive drag and drop programming for easy method setup
- > Cut and paste feature allows for fast method modification and adaptation
- > 3D view of workstation and run simulation for easier method optimization
- > Protocol setup using CSV files allows for easy setup of cherry picking protocols
- > Create, edit and simulate applications on any Windows 7 PC with epMotion Editor 40 software
- > Pierce function allows the use of foil sealed plates reducing the risk of contamination
- > The ability to leave comments makes it easy to collaborate on methods
- > Optional epBlue™ ID software allows sample tracking throughout any protocol through barcode reading
- > Optional epBlue GxP software for GMP and GLP labs complies with 21 CFR part 11 regulations and provides full transparency and accountability through maintenance of log files and digital signatures

i For more information go to www.eppendorf.com



Software Capabilities and Programming



Pipetting pattern recognition

- > Automatic recognition of pipetting patterns allows for fast and easy setup of pipetting protocols from any combination of source and destination vessels



Command options

- > Each command comes preset with the most commonly used parameters to fit most standard applications
- > For more complex methods, the epBlue software allows the user to modify pipetting parameters to fit specific requirements for demanding applications
- > Options such as "Reuse tips" and "Restore tips" decrease tip usage while increasing the versatility of the system
- > Rinse tip option allows the user to wash a tip before discarding it improving waste management



3D run simulation

- > Optimize the speed and efficiency of new protocols with the help of the 3D simulation tool that is available with all MultiCon PC versions. In addition to the regular "Check Method" function of the epBlue software, the 3D run simulation also allows you to verify that your method was programmed correctly.

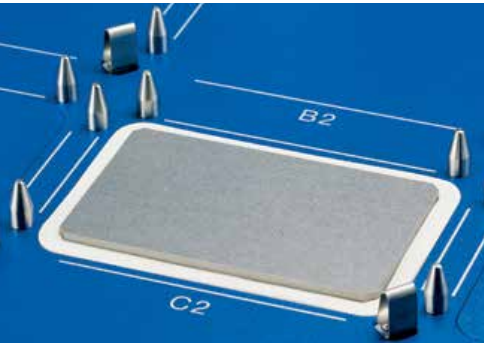


User guided programming assistant

- > Step by step guide for setting up many common automated laboratory protocols such as PCR setup, nucleic acid extraction, and liquid handling assistants that facilitates easy setup of general liquid handling tasks

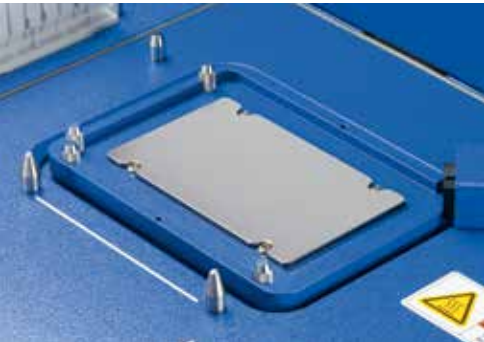


Factory-installed and Upgrade Options



Thermal module
(Catalog No. 960002181)

- > Peltier powered thermal module for on deck incubations
- > Temperature range is 0°C–110°C
- > Available as upgrade for epMotion® 5073I/P5073 (1 per unit), 5075I (3 per unit), 5075t (2 per unit), 5075m (2 per unit), 5075v (3 per unit) and 5075vt (2 per unit). For epMotion 5075 with serial number < 4,000 upgrades are possible for 5075 LH (3 per unit), 5075 TMX (1 per unit), 5075 VAC (2 per unit) but none for 5075 VACTMX (0 per unit).



ThermoMixer® (TMX)
(Catalog No. 960021055 for epMotion serial number <4,000)
(Catalog No. 5075000630 for epMotion serial number >4,000)

- > Peltier powered module integrated into epMotion deck (5075t) for on deck incubations at temperature and vigorous 2-dimensional mixing
- > Temperature range 4°C–95°C
- > Mixing speed range 300–2,000 rpm
- > Available as upgrade for 5075I and 5075v



ThermoMixer with MagSep module

- > Peltier powered module integrated into epMotion deck (5073m/M5073 and 5075m) for on deck incubations at temperature and vigorous 2-dimensional mixing and magnetic separation
- > Temperature range 4°C–95°C
- > Mixing speed range 300–2,000 rpm
- > Compatible with 2 mL microcentrifuge tubes



Vacuum module (VAC)
(Catalog No. 960021011)

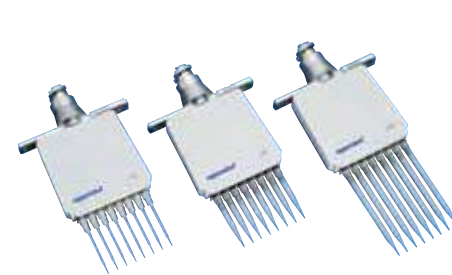
- > Adjustable vacuum manifold for fully automated handling of filter plates for nucleic acid isolation integrated into epMotion deck (5075v, 5075vt)
- > Multiple frames and spring construction makes it compatible with most filter plates
- > Suction range 0.1–0.85 ± 0.05 Pa
- > Available as upgrade for 5075I and 5075t

epMotion® Tools



Dispensing tools—Single-channel

- > High precision single channel dispensing tools for delivery of volumes from 1–1,000 µL
- > Built in calibration sensor can detect when tool may need adjustment
 - 960001010 – Dispensing tool TS50, 1–50 µL
 - 960001028 – Dispensing tool TS300, 20–300 µL
 - 960001036 – Dispensing tool TS1000, 40–1,000 µL



Dispensing tools—Multichannel

- > High precision eight channel dispensing tools for delivery of volumes from 1–1,000 µL to SBS format plates and tube strips up to 384 wells
- > Built in calibration sensor can detect when tool may need adjustment
 - 960001044 – Dispensing tool TM50, 1–50 µL
 - 960001052 – Dispensing tool TM300, 20–300 µL
 - 960001061 – Dispensing tool TM1000, 40–1,000 µL



Gripper tool

- > Tool allows for fully automated transport of tube racks, plates and accessories during an epMotion method
- > Tool automatically recognized and exchanged when needed
- > Available for 5073I/P5073, 5073m/M5073, 5075I, 5075t, 5075m and 5075v
 - 960002270 – Gripper





epMotion® Accessories



Reservoir rack

- > Versatile rack for holding up to 7 bulk reagents in either 30 mL or 100 mL reservoirs or various tubes from 0.2 mL PCR tubes to 50 mL conical tubes
- > Temperature control possible when used in combination with a thermal module and Reservoir Rack Modules TC
- > 2 Reservoir Rack options are available
 - 960002148 – 7-place rack for use on standard SBS/ANSI deck position
 - 5075754070 – 3-place rack for use on half-position deck position with 5075m and 5075t



Reagent reservoirs

- > Autoclavable reservoir for storing bulk reagents and accessible with multichannel tool
- > Their special geometry minimizes residual volume.
 - 960051009 – Reagent reservoir 30 mL, PCR clean, pk/50
 - 960051017 – Reagent reservoir 100 mL, PCR clean, pk/50



Reservoir Rack Module TC

- > For use in Reservoir racks and temperature controlled when used with a thermal module
- > 10 modules are available for tube volumes from 0.2 mL to 50 mL
 - 960002601 – for 8 x 0.2 mL PCR tubes
 - 960002620 – for 4 x 1.5/2.0 mL tubes, incl. 0.5 mL tube sleeves
 - 960002630 – for 4 x Tubes 12 mm
 - 960002640 – for 4 x Tubes 16 mm
 - 5075799340 – for 4 x Eppendorf Tubes® 5.0 mL
 - 960002650 – for 4 x 15 mL conical tubes
 - 960002660 – for 2 x 50 mL conical tubes
 - 960002670 – for 1 x reservoir 30 mL
 - 960002680 – for 1 x reservoir 100 mL



Racks

- > 18 different racks available to allow for maximum versatility
- > No temperature control
 - 5075751453 – for 24 x 1.5/2.0 mL tubes, incl. 0.5 mL tube sleeves
 - 5075751275 – for 24 x 1.5/2.0 mL tubes
 - 960002318 – for 96 x 1.5/2.0 mL tubes (requires 2 deck positions)
 - 960002380 – for 24 x Tubes Ø 12 mm; H24 mm (e.g., HPLC vials)
 - 960002351 – for 24 x Tubes Ø 12 mm; H45 mm
 - 960002059 – for 24 x Tubes Ø 12 mm; H63 mm
 - 960002342 – for 24 x Tubes Ø 13 mm; H45 mm
 - 960002041 – for 24 x Tubes Ø 13 mm; H63 mm
 - 960002334 – for 24 x Tubes Ø 14 mm; H45 mm
 - 960002369 – for 24 x Tubes Ø 14 mm; H63 mm
 - 960002326 – for 24 x Tubes Ø 15 mm; H45 mm
 - 960002377 – for 24 x Tubes Ø 15 mm; H63 mm
 - 960002164 – for 24 x Tubes Ø 16 mm; H45 mm
 - 960002032 – for 24 x Tubes Ø 16 mm; H63 mm
 - 960002156 – for 24 x Tubes Ø 17 mm; H45 mm
 - 960002024 – for 24 x Tubes Ø 17 mm; H63 mm (e.g., 15 mL conical)
 - 960002520 – for 1 x SmartCycler® tube rack
 - 960002511 – for 96 x LightCycler® 20 µL/100 µL capillaries



Thermoracks/Thermoblocks

- > Rapid temperature transfer when used with a thermal module
- > Thermoracks can be moved by the gripper
- > Available as TMX version optimized for high speed mixing with ThermoMixer (TMX)
 - 960002083 – for 1 x 96-well PCR plate
 - 5075751666 – for 1 x 96-well PCR plate. With orientation control and 2 clamps for mixing and piercing of semi-skirted plates.
 - 960002091 – for 1 x 384-well PCR plate
 - 960002067 – for 24 x 1.5/2.0 mL tubes, incl. 0.5 mL tube sleeves
 - 960002070 – for 24 x 1.5/2.0 mL tubes, incl. 0.5 mL tube sleeves (TMX)
 - 960002075 – for 24 x 1.5/2.0 mL tubes
 - 960002080 – for 24 x 1.5/2.0 mL tubes (TMX version)
 - 960002491 – for 24 x Cryotubes Ø 12.5 mm
 - 5075751526 – for 1 x 72- or 100-tube Qiagen® Rotor-Gene® Rotor-Disc® and 20 x 1.5/2.0 mL tubes (requires 2 deck positions)
 - 960002500 – for 384 x Corbett® 0.1 mL strip-tubes



Thermoadapter

- > Rapid temperature transfer when used with a thermal module
- > Plates can be added/removed from the Thermoadapters by the gripper
 - 960002199 – for 1 x 96-well PCR plate
 - 960002202 – for 1 x 384-well PCR plate
 - 5075751577 – for 1 x Microplate 96 (U or V bottom)
 - 960002391 – for 1 x Eppendorf Deepwell Plate 96/1,000
 - 5075751330 – for 1 x Eppendorf Deepwell Plate 96/2,000
 - 5075751305 – for 1 x MagNA Pure® sample cartridge



epT.I.P.S.® Motion



- Product features**
- > Color-coded trays for direct volume identification
 - > Double O-ring on dispensing tools assures an optimal fit each time
 - > Optical sensor automatically identifies tip type

Description

Automated pipetting processes place high demands on the design and material of pipette tips used. Eppendorf has specially designed the epT.I.P.S. for use on the epMotion® 5070, 5073 and 5075 Liquid Handling Workstation. epT.I.P.S. Motion pipette tips, with and without filters, are racked in torsion resistant, contamination free racks insuring secure tip attachment.

- Applications**
- > Available in multiple purity grades
 - > Easily exchangeable, no additional labware files required
 - > Also available as a reload system
 - > Available as epT.I.P.S. Motion SafeRacks recommended for the re-use tips feature

Ordering information		
Description	Catalog No.	List USD
epT.I.P.S.® Motion		
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030014405	\$ 92.00
Eppendorf Quality™, 300 µL, 960 tips (10 racks x 96 tips)	0030014448	92.00
Eppendorf Quality™, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014480	92.00
sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030015207	105.00
sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030015223	105.00
sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030015240	105.00
epT.I.P.S.® Motion Filtertips, with filter		
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030014413	177.00
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030014456	177.00
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014499	177.00
PCR clean and sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030015215	211.00
PCR clean and sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030015231	211.00
PCR clean and sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030015258	211.00
epT.I.P.S.® Motion as SafeRack tips		
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030014600	111.00
Eppendorf Quality™, 300 µL, 960 tips (10 racks x 96 tips)	0030014626	111.00
Eppendorf Quality™, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014642	111.00
epT.I.P.S.® Motion as SafeRack tips, with filter		
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030014618	211.00
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030014634	211.00
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014650	211.00

i For more information go to www.eppendorf.com



epT.I.P.S.® Motion as Reload System



Description

epT.I.P.S. Motion can be used with epMotion 96 or integrated into your workstation as a reload system when combined with the tip holder. The high-quality reload tips are delivered in a PET thermoformed tray with sealed lid. Upgrading to the autoclavable, aluminum tip holder, which replaces the disposable box, provides waste reduction of up to 40 percent.

- Product features**
- > Delivered in a PET blister packaging with a sealed cap to assure quality
 - > Color coded trays for easy volume identification
 - > Reload system with autoclavable aluminium tip holder reduces plastic waste of tip boxes by up to 40%
 - > Available with standard and filter/PCR clean tips

- Applications**
- > Easy conversion with TipHolder Adapter
 - > TipHolder Adapter is autoclavable

Ordering information		
Description	Catalog No.	List USD
epT.I.P.S.® Motion as Reload System		
Eppendorf Quality™, 50 µL, 2304 tips (24 trays x 96 tips)	0030014421	\$204.00
Eppendorf Quality™, 300 µL, 2304 tips (24 trays x 96 tips)	0030014464	204.00
Eppendorf Quality™, 1,000 µL, 2304 tips (24 trays x 96 tips)	0030014502	204.00
epT.I.P.S.® Motion as Reload System, with filter		
PCR clean, 50 µL, 2304 tips (24 trays x 96 tips)	0030014430	406.00
PCR clean, 300 µL, 2304 tips (24 trays x 96 tips)	0030014472	406.00
PCR clean, 1,000 µL, 2304 tips (24 trays x 96 tips)	0030014510	406.00
PCR clean and sterile, 50 µL, 2304 tips (24 trays x 96 tips)	0030014529	466.00
PCR clean and sterile, 300 µL, 2304 tips (24 trays x 96 tips)	0030014537	466.00
TipHolder , for epT.I.P.S.® Motion Reloads	5075751399	580.00



MagSep Reagent Kits



Description

MagSep reagent kits are used with the epMotion® 5073m/ M5073 and 5075m to automatically purify nucleic acids from biological samples. Magnetic beads, Proteinase K and all other reagents are prepackaged in special trays for the epMotion for 4 sets of 24 purifications. MagSep reagents deliver highly purified nucleic acids with very high yields. The special Prep Assistant software, combined with the epMotion 5073m/M5073 or 5075m, offers simple, step-by-step guided automatic nucleic acid purification for everyday use.

Applications

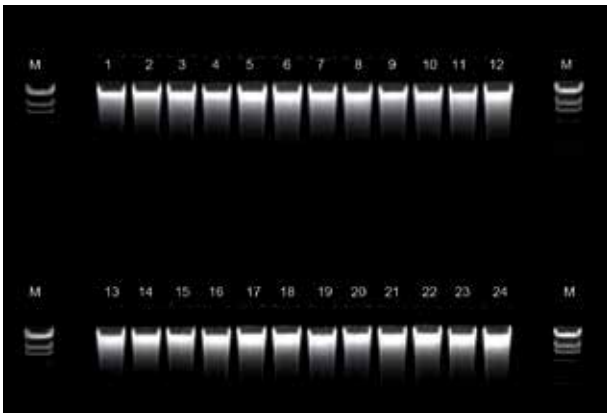
- > Genomic DNA from tissue, cell culture, or bacteria - MagSep Tissue gDNA kit
- > Genomic DNA from 200 µL of whole blood - MagSep Blood gDNA kit
- > Viral nucleic acids from serum, plasma or other cell-free body fluids - MagSep viral DNA/RNA kit

Product features

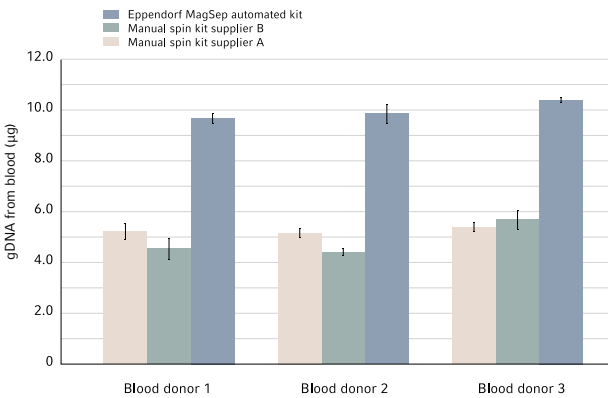
- > Higher yields compared to manual purifications
- > High nucleic acid purity, suitable for PCR or other enzymatic reactions
- > Automatic recognition of kit type and remaining reaction quantity
- > Variable use for 1 to 24 samples per tray
- > Minimal preparation time due to reagent trays
- > Elution in DNA LoBind vessels (supplied)

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Gel analysis of 24 mouse tail samples purified with MagSep Tissue gDNA kit; typical yield 10 µg high molecular weight DNA out of 10 mg tissue; 7.5 µL of 75 µL loaded on gel.



Typical yield of 9 µg gDNA from 200 µL of blood purified via MagSep Blood gDNA kit versus manual process of purification (n=3).



3D MagSep technology - Unique combination of magnet finger module and Eppendorf Thermomixer allow you to separate, mix and temperature control at one position. Available with epMotion 5073m/M5073 and 5075m.



Reagent kits, labware racks, MagSep hardware components and software programming PREP assistants are fully integrated to provide a ready-to-go solution for automated nucleic acid purification.

Ordering information

Description	Catalog No.	List USD
MagSep Tissue gDNA Kit , reagent kit for genomic DNA purification of 4 × 24 samples from cells & tissues	0030450000	\$ 519.00
MagSep Blood gDNA Kit , reagent kit for genomic DNA purification of 4 × 24 samples from blood	0030451007	422.00
MagSep Viral DNA/RNA Kit , reagent kit for viral DNA/RNA purification of 4 × 24 samples	0030452003	476.00
PrepRack , for 24 x Eppendorf Safe-Lock tubes 1.5/2.0 mL, for magnetic separation in 1.5/2.0 mL tubes using the MagSep module of epMotion 5073m/M5073 or 5075m	5073751006	1,290.00
ReagentRack to hold the reagent tray , for MagSep reagent kits	5075751429	155.00



epMotion® Systems

Ordering information		
Description	Catalog No.	List USD
epMotion® 96, semi-automated electronic pipette for parallel 96 channel microplate processing ,(without iPod® controller), 100 – 240 V ±10 %/50 – 60 Hz ± 5 %, 0.5 – 300 µL	5069000012	Inquire
iPod touch controller (for use with epMotion 96), 16 GB, blue	960002580	\$220.00
epMotion® 5070, 100 – 240 V/50 – 60 Hz, incl. EasyCon™ tablet, epBlue™ software, LH Assistant, mouse, and waste box	5070007001	Inquire
epMotion® 5070, 100 – 240 V/50 – 60 Hz, incl. MultiCon™ PC, epBlue™ software, LH Assistant, keyboard, mouse and waste box	5070007011	Inquire
epMotion® 5070f, for use inside a cell culture bench or fume hood, 100 – 240 V/50 – 60 Hz, incl. EasyCon™ tablet, epBlue™ software, LH Assistant, mouse, and waste box	5070007101	Inquire
epMotion® 5070f, for use inside a cell culture bench or fume hood, 100 – 240 V/50 – 60 Hz, incl. MultiCon™ PC, epBlue™ software, LH Assistant, keyboard, mouse and waste box	5070007111	Inquire
epMotion® 5073I, 100 – 240 V/50 – 60 Hz, incl. EasyCon tablet, epBlue™ software, LH Assistant, mouse and waste box	5073007401	Inquire
epMotion® 5073I, 100 – 240 V/50 – 60 Hz, incl. MultiCon™ PC, epBlue™ software, LH Assistant, keyboard, mouse and waste box	5073007411	Inquire
epMotion® 5073I with CleanCap, 100 – 240 V/50 – 60 Hz, incl. EasyCon tablet, epBlue™ software, LH Assistant, mouse and waste box	5073007501	Inquire
epMotion® 5073I with CleanCap, 100 – 240 V/50 – 60 Hz, incl. MultiCon™ PC, epBlue™ software, LH Assistant, keyboard, mouse and waste box	5073007511	Inquire
epMotion® 5073m, with integrated ThermoMixer® and MagSep module, 100 – 240 V/50 – 60 Hz, incl. EasyCon tablet, epBlue™ software, PREP Assistant, mouse and waste box	5073007801	Inquire
epMotion® 5073m, with integrated ThermoMixer® and MagSep module, 100 – 240 V/50 – 60 Hz,incl. MultiCon™ PC, epBlue™ software, PREP Assistant, keyboard, mouse and waste box	5073007811	Inquire
epMotion® 5073m with CleanCap, with integrated ThermoMixer® and MagSep module, 100 – 240 V/50 – 60 Hz, incl. EasyCon tablet, epBlue™ software, PREP Assistant, mouse and waste box	5073007901	Inquire
epMotion® 5073m with CleanCap, with integrated ThermoMixer® and MagSep module, 100 – 240 V/50 – 60 Hz, incl. MultiCon™ PC, epBlue™ software, PREP Assistant, keyboard, mouse and waste box	5073007911	Inquire
epMotion® 5073 bundle packages		
epMotion® P5073 bundle package, for automatic preparation of PCR reactions, 100 – 240 V/50 – 60 Hz, incl. epMotion 5073I with EasyCon tablet, epBlue software, PCR Assistant, mouse, dispensing tools TS 50 and TS 300, thermoblock PCR 96, rack for 24 x 1.5/2.0 mL tubes and waste box	5073000000	Inquire
epMotion® P5073 bundle package (with CleanCap), for automatic preparation of PCR reactions, 100 – 240 V/50 – 60 Hz, incl. epMotion 5073m with EasyCon tablet, epBlue software, PCR Assistant, mouse, dispensing tools TS 50 and TS 300, thermoblock PCR 96, rack for 24 x 1.5/2.0 mL tubes and waste box	5073000302	Inquire
epMotion® M5073 bundle package, for automated nucleic acid preparation from 1 -24 samples using Eppendorf MagSep kits, 100 – 240 V/50 – 60 Hz, incl. epMotion 5073m with EasyCon tablet, epBlue software, PREP Assistant, mouse, single-channel dispensing tools TS 50 and TS 1000, MagSep Reagent Rack, PrepRack for 24 x 1.5/2mL tubes, Rack for 24 x 1.5/2.0 mL tubes, waste box and liquid waste tub	5073000205	Inquire
epMotion® M5073 bundle package (with CleanCap), for automated nucleic acid preparation from 1 -24 samples using Eppendorf MagSep kits, 100 – 240 V/50 – 60 Hz, incl. epMotion 5073m with EasyCon tablet, epBlue software, PREP Assistant, mouse, single-channel dispensing tools TS 50 and TS 1000, MagSep Reagent Rack, PrepRack for 24 x 1.5/2mL tubes, Rack for 24 x 1.5/2.0 mL tubes, waste box and liquid waste tub	5073000400	Inquire
epMotion® 5075I, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, LH Assistant, keyboard, mouse and waste box	5075006018	Inquire



epMotion® Systems

Ordering information		
Description	Catalog No.	List USD
epMotion® 5075I with CleanCap, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, LH Assistant, keyboard, mouse and waste box	5075006019	Inquire
epMotion® 5075v, with integrated vacuum system, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse, gripper, Vac Frame 2, Vac Frame holder and waste box	5075006020	Inquire
epMotion® 5075v with CleanCap, with integrated vacuum system, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse, gripper, Vac Frame 2, Vac Frame holder and waste box	5075006021	Inquire
epMotion® 5075t, with integrated ThermoMixer®, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse and waste box	5075006022	Inquire
epMotion® 5075t with CleanCap, with integrated ThermoMixer®, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse and waste box	5075006023	Inquire
epMotion® 5075vt, with integrated vacuum system and ThermoMixer®, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse, gripper, Vac Frame 2, Vac Frame holder and waste box	5075006035	Inquire
epMotion® 5075vt with CleanCap, with integrated vacuum system and ThermoMixer®, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, keyboard, mouse, gripper, Vac Frame 2, Vac Frame holder and waste box	5075006034	Inquire
epMotion® 5075m, with integrated ThermoMixer® and MagSep module, 100 – 240 V/ 50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, PREP Assistant, PCR Assistant, keyboard, mouse and waste box	5075006024	Inquire
epMotion® 5075m with CleanCap, with integrated ThermoMixer® and MagSep module, 100 – 240 V/50 – 60 Hz, incl. MultiCon all-in-one PC, epBlue software, PREP Assistant, PCR Assistant, keyboard, mouse and waste box	5075006025	Inquire

epMotion® Upgrade Kits

Ordering information		
Description	Catalog No.	List USD
Thermal Module upgrade option, thermal module for heating or cooling thermoadapters, thermoblock and thermoracks. Requires installation by an Eppendorf service technician, extra cost applies.	960002181	Inquire
ThermoMixer upgrade option (for units SN>4000), for heating, cooling and mixing of tubes and plates. Additional deck extension plate might be required. Requires installation by an Eppendorf service technician, extra cost applies.	5075000630	Inquire
ThermoMixer upgrade option (for units SN<4000), for heating, cooling and mixing of tubes and plates. Additional deck extension plate might be required. Requires installation by an Eppendorf service technician, extra cost applies.	960021055	Inquire
Vacuum Module upgrade option, for automated processing of filter plates. Additional deck extension plate might be required. Requires installation by an Eppendorf service technician, extra cost applies.	960021011	Inquire
MultiCon PC upgrade kit, for upgrading epMotion 5070 and 5073 EasyCon versions to a MultiCon PC. Includes MultiCon PC with preinstalled epBlue™ software, PREP Assistant, and PCR Assistant.	5075000725	Inquire
Software & Hardware upgrade kit, for upgrading an epMotion 5075 with serial number 1,000 - 4,000 to the revision of an epMotion SN >4,000. Additional deck extension plate might be required. Requires installation by an Eppendorf service technician (901513510), extra cost applies.	5075000709	Inquire
Deck extension plate 5075I, for units SN>4000	5075000641	Inquire
Deck extension plate 5075t, for units SN>4000	5075000642	Inquire
Deck extension plate 5075 TMX, for units SN<4000	960021066	Inquire
Deck extension plate 5075v and 5075 VAC	5075000643	Inquire
Deck extension plate 5075vt and 5075 VACTMX	5075000640	Inquire



epMotion® Consumables

Ordering information		
Description	Catalog No.	List USD
epT.I.P.S.® <i>Motion</i>, non-filter		
Eppendorf Quality™, 50 µL, 960 tips (10 racks x 96 tips)	0030014405	\$ 92.00
Eppendorf Quality, 300 µL, 960 tips (10 racks x 96 tips)	0030014448	92.00
Eppendorf Quality, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014480	92.00
Sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030015207	105.00
Sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030015223	105.00
Sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030015240	105.00
epT.I.P.S. <i>Motion</i>, with filter		
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030014413	177.00
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030014456	177.00
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014499	177.00
PCR clean and sterile, 50 µL, 960 tips (10 racks x 96 tips)	0030015215	211.00
PCR clean and sterile, 300 µL, 960 tips (10 racks x 96 tips)	0030015231	211.00
PCR clean and sterile, 1,000 µL, 960 tips (10 racks x 96 tips)	0030015258	211.00
epT.I.P.S. <i>Motion</i> SafeRack (optimized for reuse tip function)		
Eppendorf Quality, 50 µL, 960 tips (10 racks x 96 tips)	0030014600	111.00
Eppendorf Quality, 300 µL, 960 tips (10 racks x 96 tips)	0030014626	111.00
Eppendorf Quality, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014642	111.00
epT.I.P.S. <i>Motion</i> SafeRack, with filter (optimized for reuse tip function)		
PCR clean, 50 µL, 960 tips (10 racks x 96 tips)	0030014618	211.00
PCR clean, 300 µL, 960 tips (10 racks x 96 tips)	0030014634	211.00
PCR clean, 1,000 µL, 960 tips (10 racks x 96 tips)	0030014650	211.00
epT.I.P.S. <i>Motion</i> as reload system		
Eppendorf Quality, 50 µL, 2,304 tips (24 trays x 96 tips)	0030014421	204.00
Eppendorf Quality, 300 µL, 2,304 tips (24 trays x 96 tips)	0030014464	204.00
Eppendorf Quality, 1,000 µL, 2,304 tips (24 trays x 96 tips)	0030014502	204.00
epT.I.P.S. <i>Motion</i> as reload system, with filter		
PCR clean, 50 µL, 2,304 tips (24 trays x 96 tips)	0030014430	406.00
PCR clean, 300 µL, 2,304 tips (24 trays x 96 tips)	0030014472	406.00
PCR clean, 1,000 µL, 2,304 tips (24 trays x 96 tips)	0030014510	406.00
PCR clean and sterile, 50 µL, 2304 tips (24 trays x 96 tips)	0030014529	466.00
PCR clean and sterile, 300 µL, 2304 tips (24 trays x 96 tips)	0030014537	466.00
TipHolder, for epT.I.P.S. <i>Motion</i> Reloads	5075751399	580.00
Reservoir 30 mL , large-volume container for reagent presentation on the ep <i>Motion</i> ®, can only be inserted with the Reservoir Rack; production batch testing, certified 30 mL, 10 x 5 reservoirs in the bag, PCR clean, polypropylene	960051009	236.00
Reservoir 100 mL , large-volume container for reagent presentation on the ep <i>Motion</i> , can only be inserted with the Reservoir Rack; production batch testing, certified 100 mL, 10 x 5 reservoirs in the bag, PCR clean, polypropylene	960051017	345.00
Reservoir 400 mL , large-volume container in SBS format for reagent presentation on the ep <i>Motion</i> ; production batch testing, certified 400 mL, 10 reservoirs, autoclavable, polypropylene	5075751364	223.50
Eppendorf MagSep™ reagent kits for nucleic acid purification		
MagSep Tissue gDNA Kit , reagent kit for genomic DNA purification of 4 x 24 samples from cells & tissues	0030450000	519.00
MagSep Blood gDNA Kit , reagent kit for genomic DNA purification of 4 x 24 samples from blood	0030451007	422.00
MagSep Viral DNA/RNA Kit , reagent kit for viral DNA/RNA purification of 4 x 24 samples	0030452003	476.00



epMotion® Tools and Accessories

Ordering information		
Description	Catalog No.	List USD
Dispensing Tools		
TS 50 single-channel dispensing tool , 1–50 µL volume range	960001010	\$2,555.00
TS 300 single-channel dispensing tool , 20–300 µL volume range	960001028	2,560.00
TS 1000 single-channel dispensing tool , 40–1,000 µL volume range	960001036	2,555.00
TM 50-8 eight-channel dispensing tool , 1–50 µL volume range	960001044	4,520.00
TM 300-8 eight-channel dispensing tool , 20–300 µL volume range	960001052	4,520.00
TM 1000-8 eight-channel dispensing tool , 40–1,000 µL volume range	960001061	4,520.00
Holder for 6 dispensing tools	960001109	322.00
epMotion Gripper		
Gripper , incl. holder, for transporting plates on the worktable and automatic operation of the vacuum manifold	960002270	8,754.00
Holder for gripper	960002211	646.00
Waste solutions		
Waste container with lid , for holding used pipette tips	960002016	128.00
Liquid Waste Tub, incl. lid , with working volume of 175 mL for mounting in waste box for use with 5073 and 5075	5075751500	130.00
Accessories for use with vacuum module (VAC)		
Vacuum lid	960002245	392.00
Mat for vacuum lid	960002407	256.00
Vac Frame 1	960002253	1,174.00
Vac Frame 2	960002261	1,174.00
Vac Frame holder	960002237	579.00
Elution plate adapter, for processing micro tubes in racks	960002531	148.00
Elution plate adapter, type for VAC station	960002571	177.00
Anticontamination plate adapter, for vacuum processes with foaming solutions in multiwell plates	960002540	65.60
Vac Thermo lid	960002551	2,127.00
Collection Plate adapter for M&N kits	960002571	177.00
Reservoir Rack 7-positions , holds up to 7 reservoirs (30 mL and 100 mL) or Reservoir Rack TC modules	960002148	194.00
Reservoir Rack 3-positions , holds up to 3 reservoirs (30 mL and 100 mL) or Reservoir Rack TC modules. For use on half-position deck position with 5075m and 5075t.	5075754070	164.00
Reservoir Rack Temperature Control (TC) Modules , for use in ep <i>Motion</i> ® Reservoir Rack		
for 8 x PCR tubes 0.2 mL	960002601	438.00
for 4 x Eppendorf Safe-Lock tubes 1.5/2.0 mL, incl. 0.5 mL tube sleeves	5075799081	428.00
for 4 x Eppendorf Tubes® 5.0 mL	5075799340	455.00
for 4 x reaction vessels Ø 12 mm	960002630	438.00
for 4 x reaction vessels Ø 16 mm	960002640	438.00
for 4 x reaction vessels Ø 17 mm (e.g. 15 mL conical)	960002650	438.00
for 2 x reaction vessels Ø 29 mm (e.g. 50 mL conical)	960002660	438.00
for 1 x reservoir 30 mL	960002670	177.00
for 1 x reservoir 100 mL	960002680	177.00
Adapter sleeves , to retrofit the 1.5/2.0 mL thermoracks for use with 0.5 mL vessels		
1 set of 25 pieces	960002172	374.00



epMotion® Accessories

Ordering information		
Description	Catalog No.	List USD
Racks for single test tubes , no temperature control		
for 24 x Eppendorf Safe-Lock tubes 1.5/2.0 mL	5075751275	\$ 620.00
for 24 x Eppendorf Safe-Lock tubes 1.5/2.0 mL, incl. 0.5 mL tube sleeves	5075751453	660.00
for 96 x 1.5/2.0 mL screw cap tubes (requires 2 deck positions)	960002318	1,030.00
for 24 x tubes Ø 12 mm; H24 mm (e.g., HPLC vials)	960002380	407.00
for 24 x tubes Ø 12 mm; H45 mm	960002351	407.00
for 24 x tubes Ø 12 mm; H63 mm	960002059	406.00
for 24 x tubes Ø 13 mm; H45 mm	960002342	407.00
for 24 x tubes Ø 13 mm; H63 mm	960002041	406.00
for 24 x tubes Ø 14 mm; H45 mm	960002334	407.00
for 24 x tubes Ø 14 mm; H63 mm	960002369	407.00
for 24 x tubes Ø 15 mm; H45 mm	960002326	407.00
for 24 x tubes Ø 15 mm; H63 mm	960002377	407.00
for 24 x tubes Ø 16 mm; H45 mm	960002164	407.00
for 24 x tubes Ø 16 mm; H63 mm	960002032	406.00
for 24 x tubes Ø 17 mm; H45 mm	960002156	407.00
for 24 x tubes Ø 17 mm; H63 mm (e.g., 15 mL conical tubes)	960002024	406.00
Rack Smart, for 1 x SmartCycler reaction tube rack	960002520	407.00
Rack LC, for 96 x 20 µL or 100 µL LightCycler® capillaries. Also suitable for use with Centrifuge 5804/5804 R or 5810/5810 R, set of 2.	960002511	2,858.00
PrepRack, for 24 x Eppendorf Safe-Lock tubes 1.5/2.0 mL, for magnetic separation in 1.5/2.0 mL tubes using the MagSep module of epMotion® 5073m/M5073 or 5075m	5073751006	1,290.00
ReagentRack to hold the reagent tray, for MagSep reagent kits	5075751429	155.00
Thermorack (Thermoblock) , for temperature control of plates and tubes, plates and tubes can be transported together with the thermorack		
for 1 x PCR plate, 96-well, or 96 x 0.2 mL PCR tubes	960002083	907.00
for 1 x PCR plate, 96-well, with orientation control and 2 clamps for safe mixing and piercing of semi-skirted plates.	5075751666	935.00
for 1 x PCR plate, 384-well	960002091	1,461.00
for 24 x Eppendorf Safe-Lock tubes, 1.5/2.0 mL	960002075	1,006.00
for 24 x Eppendorf Safe-Lock tubes, 1.5/2.0 mL, incl. 0.5 mL tube sleeves	960002067	1,173.00
for 24 x Eppendorf Safe-Lock tubes, 1.5/2.0 mL (TMX version)	960002080	1,214.00
for 24 x Eppendorf Safe-Lock tubes, 1.5/2.0 mL, incl. 0.5 mL tube sleeves (TMX version)	960002070	1,173.00
for 24 x Cryotubes® Ø 12.5 mm	960002491	1,214.00
for 384 x Corbett® 0.1 mL strip-tubes	960002500	1,532.00
for 1 x 72- or 100-tube Qiagen® Rotor-Gene® Rotor-Disc® and 20 x 1.5/2.0 mL tubes (requires 2 deck positions)	5075751526	1,040.00
Lid cover with holder for Qiagen Rotor-Gene adapter	5075751640	325.00
Thermoadapter , for temperature control of plates, plates can be removed by the gripper		
for 1 x PCR plate, 96-well	960002199	907.00
for 1 x PCR plate, 384-well	960002202	1,007.00
for 1 x Microplate 96 (U or V bottom)	5075751577	640.00
for 1 x DWP 96/1000, for Eppendorf Deepwell Plates 96/1,000 µL	960002391	1,665.00
for 1 x DWP 96/2000, for Deepwell Plates 96/2,000 µL	5075751330	640.00
for 1 x MagNA Pure LC sample cartridge	5075751305	725.00
Thermoadapter Frosty , combination of height adapter and PCR-Cooler, for cooling 1 x PCR plate, 96-well, skirted	960002300	887.00



epMotion® Accessories

Ordering information		
Description	Catalog No.	List USD
Height adapter , for leveling labware, enables faster plate processing		
40 mm, 1 pc.	960002121	579.00
55 mm, 1 pc.	960002113	579.00
85 mm, 1 pc.	960002105	579.00
Eppendorf Magnum EX Magnet , for magnetic bead separation in 96 well plates	960066123	1,560.00
Eppendorf Magnum FLX Magnet , for magnetic bead separation in 96 well plates	960066124	2,740.00

epMotion® Software

Ordering information		
Description	Catalog No.	List USD
epBlue™ ID barcode and tracking software incl. manual barcode scanner , modular expansion of epBlue™ for barcode support. Incl. manual barcode reader with stand. Compatible with epBlue™ version 40.1 and higher	5075002701	Inquire
epBlue™ ID software and hardware modification kit , for 5070 and 5075 PC versions, barcode support includes software, barcode reader and stand, compatible with all epMotion® PC versions except epMotion® 5075 MC PC version, not compatible with the epMotion® control panel versions	5075000830	Inquire
epBlue™ GxP software , for use in regulated process environments (according to GLP, GMP, 21 CFR), as configuration option or for pre-installed epMotion® MultiCon versions with epBlue™ version 40.1 or higher, with epBlue™ GxP software, corresponding firmware, certificates	5075002728	Inquire
epBlue™ GxP software modification kit , for use in regulated process environments (according to GLP, GMP, 21 CFR), for pre-installed epMotion® PC versions, with epBlue™ GxP software, corresponding firmware, USB hardware key, certificates. Requires 627B version of integrated PC	5075000849	Inquire
epMotion® Editor , epMotion® Editor 40, software CD ROM with instructions, used to create, edit and simulate application on a PC, compatible with epBlue™ version >40.x	5075014220	\$1,980.00
epMotion® Editor , incl. editor key, for creating and editing applications, runs on the PC, compatible with epBlue™ 10.x versions, complete software package	960000269	3,152.00
epMotion® Editor , incl. editor key, for creating and editing applications, runs on the PC, compatible with epBlue™ 10.x versions, additional user license	960000300	1,225.00
LH Assistant software license , provides step-by-step programming guidance to set up for general liquid handling tasks like Reformatting, Assay set up, Dilution series, Normalization, Cherry picking, Pool samples and Wash	5075002507	543.00
PCR Assistant software license , designed to streamline and automate the whole PCR set up workflow. Facilitates easy method set up for PCR steps like Compose MasterMix, Normalize Concentrations, Create Dilution Series and Setup PCR Reactions	5075002515	543.00
PREP Assistant software license , provides step-by-step programming guidance to set up nucleic acid purification protocols for the Eppendorf MagSep reagent kits	5075002523	543.00

To activate your epMotion software licenses, please go to: www.eppendorf.com/software-licensing



epMotion® Performance Plans

- Long term benefits of Performance Plans**
- > Confidence in results
 - > Assurance of performance over an extended lifetime
 - > GLP compliance

- Features of Eppendorf Performance Plans**
- > Complete satisfaction and quality delivered by Eppendorf experts
 - > Complete programs—easy to understand, easy to budget, no surprises
 - > Complete documentation management—everything you need to be in compliance



For more information go to www.eppendorf.com/epServices.

epMotion Tool Calibration Service Summary		
Procedures	Advantage epMotion Tool Certification	epMotion Tool GLP/ GMP Custom
Internal/external inspection and cleaning of pipetting tool	Yes	Yes
Replacement of worn or broken parts, if needed ¹	Yes	Yes
Pipette calibration performed using NIST-traceable, semi-micro (0.00001 g) balance	Yes	Yes
Number of measuring points:		As requested, based on customer requirements; may include “as found” data. Min 4/channel Max 10/channel
single-channel tool	4 low/mid/high	
multichannel tool	4 low/mid/high per channel	
Individual weighing results:		
measured	Yes	Yes
recorded	Yes	Yes
Mean volume, inaccuracy and imprecision values measured and recorded	Yes	Yes
Calibration label applied to pipetting tool	Yes	Yes
Calibration report supplied	Yes	Yes
Single-channel pipetting tool (spare parts additional if needed)		
Catalog No.	901510597	901510600
List USD (shipping not included)	\$220.00 (includes 4/4/4 as returned only)	\$220.00 plus \$1 per extra reading
Multichannel pipetting tool (spare parts additional if needed)		
Catalog No.	901510599	901510602
List USD (shipping not included)	\$377.00 (includes 4/4/4 as returned only)	\$377.00 plus \$1 per extra reading

¹ Spare parts additional if needed.



- Service features**
- > Eppendorf quality and integrity maintained
 - > Original Eppendorf spare parts used
 - > Certified calibration reports provided
 - > Programs are clearly outlined with no hidden fees—makes choosing and budgeting for them easy

- Long-term benefits**
- > Consistent, reliable system operation
 - > Confidence in results
 - > Audited system for GLP compliance



For more information go to www.eppendorf.com/epServices.

Performance Plans	Description
Dispensing tool Extended Warranty	Extends manufacturer’s coverage beyond the initial 2-year period after the tool is purchased. Includes parts and labor cost for qualifying repairs.
Performance Plans	Description
Installation Qualification/ Operational Qualification (IQ/OQ)	Field Service Engineer will install the instrument in the laboratory and assure operation according to manufacturer’s specifications. The qualification procedure includes a full function test of all operating parameters. Documentation of the installation and performance results are provided along with NIST traceable documentation of test equipment used. An initialed and dated service label is affixed to the instrument.
Certification/OQ	Certification/OQ documents the specific performance results according to manufacturer’s specifications and includes all elements of a Preventive Maintenance. An exclusive numbered certificate with the specific performance results is provided. Eppendorf keeps the certificate in an electronic file for three years. An exclusive numbered, initialed, and dated service label will be affixed to the instrument. All test equipment used in the certification process is NIST traceable.
Preventive Maintenance (PM)	Contains a safety check of the system, cleaning, lubricating, a visual inspection, and the testing of the functional parts. Performance parameters of the instrument are verified to meet manufacturer’s specifications. If parts are required, a discount will apply for the required parts and additional labor will be included. A service report together with a dated and initialed service label will be affixed to the instrument upon completion of the service. Documentation is in the form of a pass/fail checklist for the performance parameters. In addition, the service includes the calibration of four (4) dispensing tools. For systems with the CleanCap option, the HEPA filter will be replaced during visit.
Advantage OS ¹	Covers all parts and labor for one (1) complete Preventive Maintenance visit, one (1) repair visit and four (4) dispensing tool calibrations. For systems with the CleanCap option, the HEPA filter will be replaced during Preventive Maintenance visit. Customer may opt to upgrade to Premium service.
Extended Warranty ¹	Includes unlimited unplanned visits for system repair including all parts, labor, travel with detailed documentation explaining the service performed for a 1 year period. This service does not include a Preventive Maintenance visit or tool calibrations.
Premium ¹	A Premium Full Service agreement for epMotion® systems is the most comprehensive service option. A single annual fee includes all parts and labor, for one (1) complete Preventive Maintenance (PM), unlimited repair visits for the system and six (6) dispensing tool calibrations.

¹ If not purchased with the system or after the warranty period a qualifying Preventive Maintenance is required, additional exclusions apply.



epMotion® 96 Performance Plans

Preventive Maintenance and Verification Services

The Eppendorf epMotion 96 is a semi-automated electronic pipette for fast and precise parallel 96 channel microplate processing. The reliability of the electronic parallel pipetting system movement is the prerequisite for high precision and reproducibility of results across the whole 96 or 384 well plate. Maintaining and verifying your systems accuracy and precision on a regular basis is thus highly recommended to make sure your system is operating according to specification. With our service plan you receive assured results with your downstream applications and your valuable samples and reagents. Eppendorf offers a range of services for different user requirements.



Performance Plans	ESSENTIAL CHECK
Catalog No.	0082030003
Checks and Maintenance	
Cleaning	
Lubrication of dispensing head	
Checking and exchanging of 96 O-rings from cones	■
Software/firmware update if applicable	
Verification (Calibration)	
Leak Test (50 µL + 300 µL)	■
Gravimetric Test - systematic error (50 µL + 300 µL)	
Photometric Test - random error (2 volumes)	
Documentation	
Check List provided	■
Dated service sticker to confirm Eppendorf service	■
Calibration Report	
IQ Report	
OQ Report/Certificate	
Supporting Information	
Contract period	one year
Number of routine service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
Order number for combined Installation and Operational Qualification (IQ/OQ) services: 0082030009. Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.	



Service features

- > Leak test
- > Exchange of O-rings
- > Gravimetric test for accuracy verification
- > Photometric test for precision verification

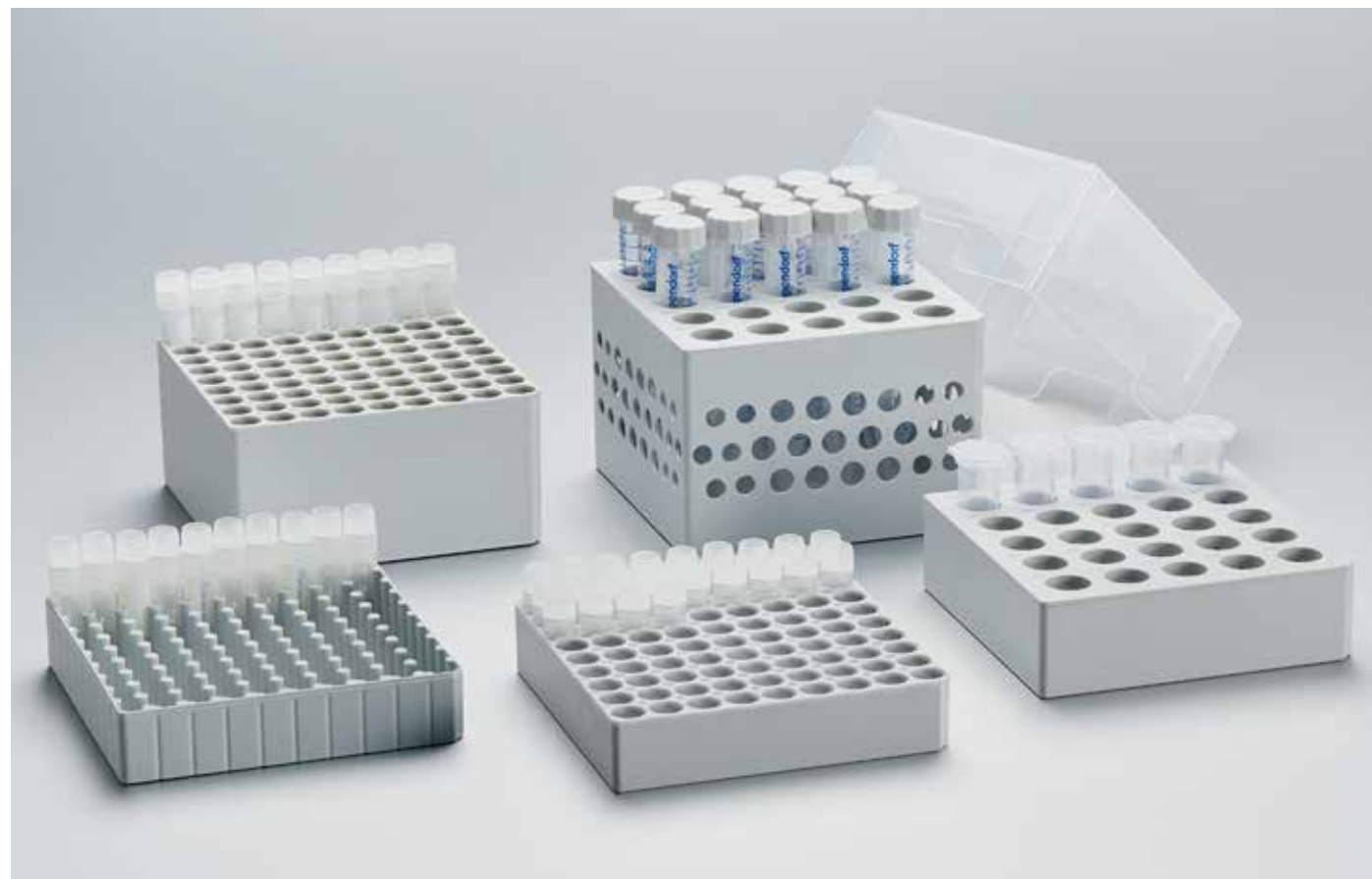
For more information go to www.eppendorf.com/epServices. In selected countries only.

Long-term benefits

- > Confirmation of performance within manufacturer specifications
- > Confidence in results
- > GLP compliant documentation

ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082030004	0082030005	0082030007	0082030008
■	■		
■	■		
■	■		
■	■		
■	■	■	■
■	■		■
■	■		■
■	■		
■	■	■	■
■	■		■
		■	
			■
			■
one year	one year	n/a	n/a
one	one	n/a	n/a
not included	Included	n/a	n/a

Sample Handling



Technology leader in sample handling for more than 60 years

Eppendorf products set standards in a wide variety of laboratory areas at an early stage – standards that still serve as yardsticks for others today. Sample handling encompasses many different work processes and steps: centrifugation, heating, freezing, mixing, amplification, and analysis of samples. Eppendorf offers the devices and consumables needed for each of these steps and allows users to feel assured that the work they perform is of the highest quality.

- > Mixers and Heaters 132-145
- > Tubes, Plates, storage boxes and racks 161-183
- > Centrifuges and Rotors 186-264
- > Concentrators 150-153
- > Cyclers and PCR Consumables 272-295
- > ULT-Freezers 302-326
- > Performance Plans 154-155, 266-269, 296-297, 327-329



Model	Eppendorf ThermoMixer® C	Eppendorf ThermoStat™ C	Eppendorf ThermoMixer® F0.5
Page	132	136	142
Dimensions (W × D × H)	8.1 x 11.9 x 5.3 in / 20.6 x 30.4 x 13.6 cm	8.1 x 11.9 x 5.3 in / 20.6 x 30.4 x 13.6 cm	8.1 x 11.9 x 6.4 in / 20.6 x 30.4 x 16.3 cm
Weight w/o accessories	13.9 lb / 6.3 kg	9.7 lb / 4.4 kg	13.6 lb / 6.2 kg
Max. power consumption	200 W	200 W	200 W
Heating rate	Max. 7 °C/min (when using SmartBlock plates) ¹⁾	Max. 9 °C/min (when using the SmartBlock PCR 384) ¹⁾	Max. 15 °C/min
Cooling rate	Max. 2.5 °C/min between 100 °C and RT	Max. 5.0 °C/min between 110 °C and RT ¹⁾	–
Timer	15 sec to 99:30 h, continuous	15 s to 99:30 h, continuous	–
Mixing and vortexing radius	1.5 mm	–	1.5 mm
Mixing orbit	3 mm	–	3 mm
Mixing frequency	300–3,000 rpm ¹⁾	–	300-2,000 rpm
Minimum and maximum temperature settings	1 °C / 100 °C	-10 °C / 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)	1 °C / 100 °C
Temperature range	Min: 15 °C (depends on SmartBlock used) below RT, max: 100 °C	Min: 30 °C ¹⁾ below RT, max: 110 °C (110 °C when using the 12 mm and cryo SmartBlocks)	Min: 4 °C above RT, max: 100 °C
Temperature accuracy	Max. ±0.5 °C at 20 – 45 °C	Max. ±0.5 °C at 20-45 °C ¹⁾	Max. ±0.5 °C at 20– 45 °C
Interfaces	USB interface	USB interface	USB interface
Applications	> Plasmid/RNA/DNA purification > cDNA synthesis > Extraction of DNA fragments from agarose gels > Enzymatic reactions (e.g., DNA restriction digestion, Proteinase K digestion and ligation) > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Labeling of DNA, RNA, and proteins > Bacterial growth in microreaction vessels, conical tubes, and deepwell plates > Lysis reactions at 100 °C > Mixing of PCR setups	> Gentle thawing and cooling buffers and samples at low temperatures > Preheating media > Biochemical reactions at low temperatures > Ligation > cDNA synthesis > Denaturation of RNA, DNA, and protein > Proteinase K digestion > ELISA assays > Immunoprecipitation > Cell lysis	> Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays

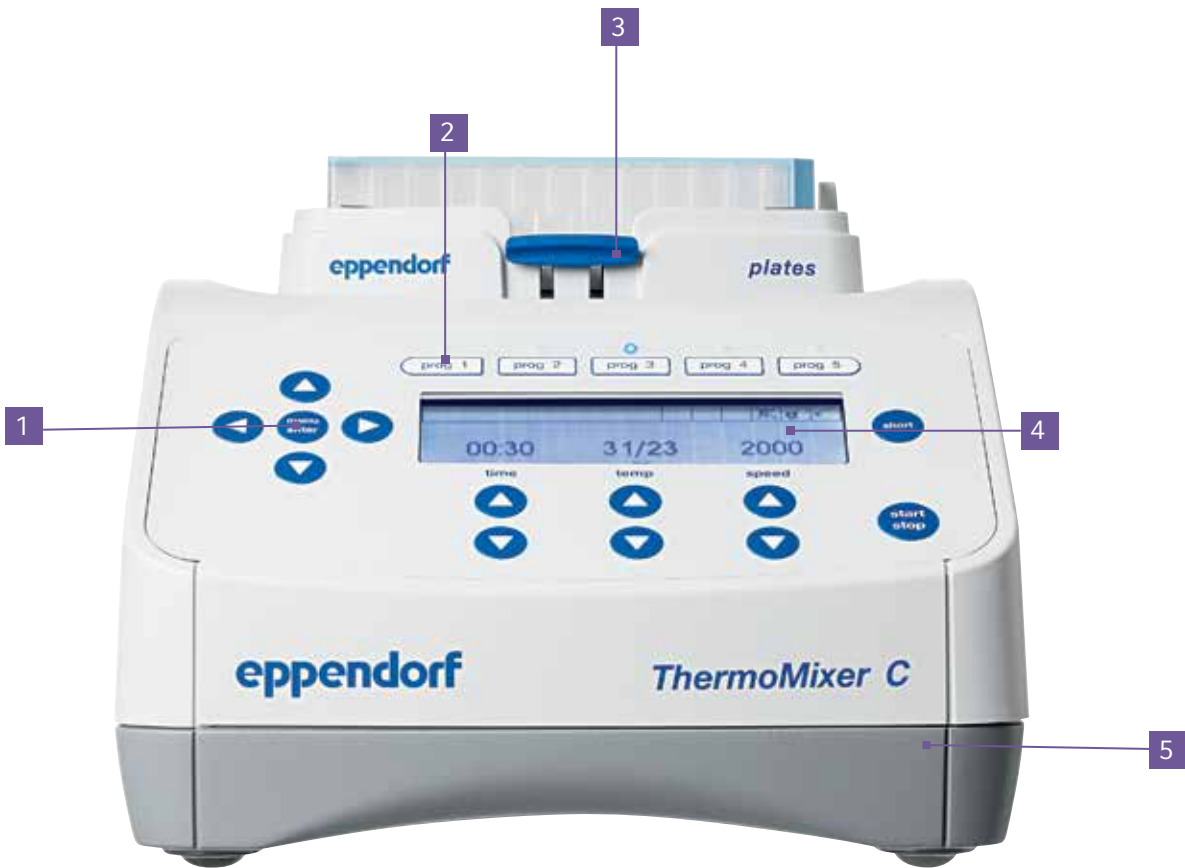
¹⁾ depends on SmartBlock used



Model	Eppendorf ThermoMixer® F1.5	Eppendorf ThermoMixer® F2.0	Eppendorf ThermoMixer® FP	MixMate®
Page	143	143	143	144
Dimensions (W × D × H)	8.1 x 11.9 x 6.7 in / 20.6 x 30.4 x 17.0 cm	8.1 x 11.9 x 6.7 in / 20.6 x 30.4 x 17.0 cm	8.1 x 11.9 x 6.4 in / 20.6 x 30.4 x 16.4 cm	6.7 x 9.0 x 5.1 in / 17 x 23 x 13 cm
Weight w/o accessories	13.9 lb / 6.3 kg	13.9 lb / 6.3 kg	13.4 lb / 6.1 kg	9.2 lb / 4.2 kg
Max. power consumption	200 W	200 W	200 W	40 W
Heating rate	Max. 11 °C/min	Max. 13 °C/min	Max. 18 °C/min	–
Cooling rate	–	–	–	–
Timer	–	–	–	–
Mixing and vortexing radius	1.5 mm	1.5 mm	1.5 mm	1.5 mm
Mixing orbit	3 mm	3 mm	3 mm	3 mm
Mixing frequency	300-1,500 rpm	300-1,500 rpm	300-2,000 rpm	300 – 3,000 rpm
Minimum and maximum temperature settings	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C	–
Temperature range	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C	N/A
Temperature accuracy	Max. ±0.5 °C at 20– 45 °C	Max. ±0.5 °C at 20– 45 °C	Max. ±1 °C at 20– 45 °C	–
Interfaces	USB interface	USB interface	USB interface	–
Applications	> Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays	> Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays	> Growth of bacteria and yeasts > Enzymatic reactions > Transformation of bacteria strains and plasmids > Denaturation of DNA, RNA, and proteins > Lysis reactions at 100 °C > Labeling of nucleic acids and proteins > Proteinase K digestion of cells and tissues > Resuspension of pellets > Mixing protein quantification assays > ELISA assays	> Resuspending pellets (e.g., bacteria, DNA, cell culture pellets) > Mixing PCR setups > Mixing viscous liquids and suspensions (incl. beads) > Mixing restriction digestions > Immunoassays (e.g., ELISA) > Colorimetric assays (e.g., Bradford, Lowry, BCA) > Reporter gene assays (e.g. β-galactosidase, luciferase) > Vortexing numerous tube formats (e.g., 15 and 50 mL conical tubes)

Eppendorf ThermoMixer® C

HEATING, MIXING,
COOLING



- 1. Menu**

 - > Simple and intuitive operation
 - > Save up to 20 user defined programs
 - > Set heating and cooling rates, select desired time mode
 - > Change device settings key-lock, signal tones, contrast, service interval and menu language
- 2. Program keys**

 - > Fast and simple access to the most frequently used mixing/temperature parameters
 - > Freely programmable
- 3. Eppendorf QuickRelease™**

 - > Ergonomic and simple exchange of SmartBlocks
- 4. Digital display**

 - > Clearly arranged display for easy reading and precise parameter selection
- 5. High stability and low footprint**

 - > Very stable - remains stationary even at maximum mixing speed

i For more information go to www.eppendorf.com/thermomixer-c

Product appearance, specifications, and/or prices are subject to change without notice.



HEATING, MIXING,
COOLING

Description

Sample preparation redefined. The Eppendorf ThermoMixer C combines unique mixing performance with excellent temperature control to guarantee complete, dependable and reproducible test results. Improve your assay results by mixing and incubating samples at the same time. The Eppendorf ThermoMixer C convinces users with its quick and easy-to-exchange SmartBlocks for all common lab vessels, new and improved program functions, and high level of stability for every mixing frequency. There is almost no limit to the variety of applications waiting for you!

- Applications**
- > Plasmid/RNA/DNA purification
 - > cDNA synthesis
 - > Extraction of DNA fragments from agarose gels
 - > Enzymatic reactions (e.g., DNA restriction digestion, Proteinase K digestion and ligation)
 - > Transformation of bacteria strains and plasmids
 - > Denaturation of DNA, RNA, and proteins
 - > Labeling of DNA, RNA, and proteins
 - > Bacterial growth in microreaction vessels, conical tubes, and deepwell plates
 - > Lysis reactions at 100 °C
 - > Mixing of PCR setups

- Product features**
- > Heating, mixing and cooling in all common vessel and plate formats from 5 µL to 50 mL
 - > Increased mixing frequency up to **3,000 rpm** (depending on the SmartBlock used)
 - > Excellent mixing performance due to unique ^{2D}Mix-Control technology
 - > Anti-spill technology prevents lid wetting and cross-contamination
 - > Reliable prevention of condensate formation with the Eppendorf ThermoTop (**condens.protect®**)
 - > Excellent temperature management and maximum temperature accuracy
 - > Maximum flexibility due to large selection of exchangeable SmartBlocks
 - > Simple and intuitive operation due to predefined program keys and clearly arranged menu guides
 - > Versatile program functions
 - > Ergonomic design and optimized features according to the Eppendorf PhysioCare Concept®

Eppendorf ThermoMixer® C



The outstanding ^{2D}Mix-Control technology mixes liquids in a very controlled, circular movement. The lack of chaotic splashing enables mixing without lid wetting or cross-contamination.

	Plate type	96-well plates	384-well plates
Mixing of different buffers			
Buffer with detergent	PCR	30 s 1,800 rpm	30 s 2,800 rpm
Buffer without detergent	PCR	1 min 2,000 rpm	30 s 3,000 rpm
Buffer with high salt concentration	DWP	5 s 1,400 rpm	30 s 2,000 rpm
Buffer with DMSO	MTP	5 s 1,100 rpm	5 s 2,000 rpm
Mixing of viscous solutions			
Genomic-DNA	PCR	30 s 2,000 rpm	1 min 3,000 rpm
Resuspension of pellets			
Bacteria cell pellets	DWP	30 s 2,000 rpm	2 min 2,000 rpm

Eppendorf ThermoMixer C provides enough mixing power to handle challenging mixing tasks. Most samples are efficiently mixed within less than a minute independent of vessel geometry or sample properties. For more information see AppNote 130.

Technical specifications	
Timer	15 sec to 99:30 h, continuous
Heating rate	Max. 7 °C/min (when using SmartBlock plates) ¹⁾
Cooling rate	Max. 2.5 °C/min between 100 °C and RT
Interfaces	USB interface
Power supply	100 – 130 V, 50 – 60 Hz
Max. power consumption	200 W
Dimensions (W x D x H)	8.1 x 11.9 x 5.3 in / 20.6 x 30.4 x 13.6 cm
Weight w/o accessories	13.8 lb / 6.3 kg
Temperature range	Min: 15 °C ¹⁾ below RT, max: 100 °C
Mixing and vortexing radius	1.5 mm
Mixing orbit	3 mm
Mixing frequency	300–3,000 rpm ¹⁾
Max. speed	3,000 rpm ¹⁾
Temperature accuracy	Max. ±0.5 °C at 20 – 45 °C
Temperature settings	1 °C / 100 °C
¹⁾ depends on SmartBlock used	

i For more information go to www.eppendorf.com/thermomixer-c

Product appearance, specifications, and/or prices are subject to change without notice.



A wide variety of Eppendorf SmartBlocks are available for the Eppendorf ThermoMixer C. This new generation of exchangeable thermoblocks offers the utmost flexibility for use of nearly all common vessel and plate formats.



All Eppendorf SmartBlocks are equipped with the unique Eppendorf QuickRelease™ system that makes the block exchange super fast and easy. Just press the lever on the front of the block and the block is exchanged in just seconds - no tools are needed.

Ordering information		
Description	Catalog No.	List USD
Eppendorf ThermoMixer® C, basic device without thermoblock, 100 – 130 V/50 – 60 Hz	5382000023	\$3,720.00
Eppendorf ThermoTop®, with <i>condens.protect</i> ® technology	5308000003	663.00
Eppendorf SmartBlock™ 0.5 mL, thermoblock for 24 reaction vessels 0.5 mL	5361000031	753.00
Eppendorf SmartBlock™ 1.5 mL, thermoblock for 24 reaction vessels 1.5 mL	5360000038	753.00
Eppendorf SmartBlock™ 2.0 mL, thermoblock for 24 reaction vessels 2.0 mL	5362000035	753.00
Eppendorf SmartBlock™ 5.0 mL, thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 x 5.0 mL reaction vessels	5309000007	753.00
Eppendorf SmartBlock™ 15 mL, thermoblock for 8 conical tubes 15 mL	5366000021	753.00
Eppendorf SmartBlock™ 50 mL, thermoblock for 4 conical tubes 50 mL	5365000028	753.00
Eppendorf SmartBlock™ 12 mm, thermoblock for 24 reaction vessels, diameter 11 mm – 11.9 mm, height 30 mm – 76 mm	5364000024	753.00
Eppendorf SmartBlock™ cryo, thermoblock for 24 cryo tubes, 1.5 mL – 2 mL, max. external diameter 12.5 mm, all base designs	5367000025	753.00
Eppendorf SmartBlock™ PCR 384, thermoblock for PCR plates 384, incl. lid	5307000000	997.00
Eppendorf SmartBlock™ PCR 96, thermoblock for PCR plates 96, incl. lid	5306000006	997.00
Eppendorf SmartBlock™ plates, thermoblock for microplates and deepwell plates, incl. lid	5363000039	997.00
Lid, for Eppendorf ThermoMixer® F0.5 / F1.5 / F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96 and 384, DWP	5363000233	180.00

Eppendorf ThermoStat™ C



Description
The ideal device to accurately set and maintain temperatures. The ThermoStat C features excellent temperature management. Peltier technology provides the comfortable and precise temperature control of all conventional lab vessels. The operation is easier and more intuitive than ever before. Predefined temperature keys provide quick access to five important experimental temperatures. Due to comprehensive program functions, you can also individually store 15 programs. With an extensive range of exchangeable SmartBlocks, the ThermoStat C adapts to any application.

- Product features**
- > Heating and active cooling in all common vessel and plate formats from 5 µL to 50 mL
 - > Excellent temperature management
 - > Precise temperature control from -10 °C to 110 °C *1
 - > Precise maintenance of various temperature levels
 - > Reliable prevention of condensate formation with the new ThermoTop (**condens.protect®**)
 - > Maximum flexibility thanks to large selection of exchangeable SmartBlocks
 - > Dry incubation for improved lab hygiene
 - > Simple and intuitive operation due to predefined temperature keys (4 °C, 16 °C, 37 °C, 56 °C and 95 °C)
 - > Comprehensive range of program functions

*1 110 °C can be set when using the 12 mm or cryo SmartBlocks.

- Applications**
- > Gentle thawing and cooling buffers and samples at low temperatures
 - > Preheating media
 - > Biochemical reactions at low temperatures
 - > Ligation
 - > cDNA synthesis
 - > Denaturation of RNA, DNA, and protein
 - > Proteinase K digestion
 - > ELISA assays
 - > Immunoprecipitation
 - > Cell lysis

i For more information go to www.eppendorf.com/thermostat-c



Technical specifications	
Timer	15 s to 99:30 h, continuous
Heating rate	Max. 9 °C/min (when using the SmartBlock PCR 384) ¹⁾
Cooling rate	Max. 5.0 °C/min between 110 °C and RT ¹⁾
Interfaces	USB interface
Power supply	100 – 130 V, 50 – 60 Hz
Max. power consumption	200 W
Dimensions (W x D x H)	8.1 x 11.9 x 5.3 in / 20.6 x 30.4 x 13.6 cm
Weight w/o accessories	9.7 lb / 4.4 kg
Temperature range	Min: 30 °C below RT, max: 110 °C (110 °C when using the 12 mm or cryo SmartBlocks)
Temperature accuracy	Max. ±0.5 °C at 20-45 °C ¹⁾
Temperature settings	-10 °C / 110 °C (110 °C when using the 12 mm or cryo SmartBlocks)
¹⁾ depends on SmartBlock used	

Ordering information		
Description	Catalog No.	List USD
Eppendorf ThermoStat™ C, basic device without thermoblock, 100 – 130 V/50 – 60 Hz	5383000027	\$2,710.00
Eppendorf ThermoTop®, with condens.protect® technology	5308000003	663.00

Eppendorf SmartBlock™

ACCESSORIES



Eppendorf SmartBlocks for the following reaction vessels:

- A. 24 lab vessels 11-11.9 mm in diameter
- B. 8 x 15 mL conical tubes
- C. 4 x 50 mL conical tubes
- D. Eppendorf Deepwell Plates 96/500 µL (coming soon)
- E. Eppendorf Deepwell Plates 96/1000 µL (coming soon)
- F. 24 x cryo tubes
- G. 8 x 5.0 mL Eppendorf Tubes

- H. Lid for Eppendorf SmartBlock plates, PCR 96, PCR 384, DWP, 0.5 mL, 1.5 mL and 2.0 mL
- I. 384-well PCR plates
- J. 96-well PCR plates
- K. 24 x 0.5 mL vessels
- L. 24 x 1.5 mL vessels
- M. 24 x 2.0 mL vessels
- N. MTPs and deepwell plates

Description

Flexibility has never been this easy. Eppendorf offers a wide variety of exchangeable SmartBlocks for all common vessel formats from 5 µL to 50 mL to use with Eppendorf ThermoMixer C and ThermoStat C. What’s more, the product range is augmented by individual SmartBlocks for PCR vessels. All SmartBlocks are equipped with the unique Eppendorf QuickRelease system that makes the block exchange super fast and easy. Just press the lever on the front of the block and the block is exchanged in just seconds - no tools are needed. Screws and tools are no longer necessary.

Product features

- > Fast and simple block exchange due to Eppendorf QuickRelease™ technology
- > Optimized block design guarantees maximum temperature transfer to the sample
- > Individually sensor-controlled Eppendorf SmartBlock™ allow for block-specific calibration to provide maximum temperature accuracy and homogeneity
- > Insulated thermoblocks for ergonomic operation - you won’t burn your fingers
- > Safe and ergonomic work via thermal insulation of blocks

i For more information go to www.eppendorf.com/smartblocks

Product appearance, specifications, and/or prices are subject to change without notice.

ACCESSORIES



All Eppendorf SmartBlocks are equipped with the unique Eppendorf QuickRelease™ system that makes the block exchange super fast and easy. Just press the lever on the front of the block and the block is exchanged in just seconds - no tools are needed.

Technical specifications					
Description	Lid ¹⁾	Max. speed	Max. temp.	ThermoMixer C ThermoStat C	ThermoTop
Eppendorf SmartBlock™ 0.5 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 1.5 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 2.0 mL	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ 5.0 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 15 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 50 mL		1,000 rpm	100 °C	■	
Eppendorf SmartBlock™ 12 mm		2,000 rpm	110 °C ³⁾	■	
Eppendorf SmartBlock™ cryo		2,000 rpm	110 °C ³⁾	■	
Eppendorf SmartBlock™ plates	■	3,000 rpm ²⁾	100 °C	■	■
Eppendorf SmartBlock™ PCR 96	■	2,000 rpm	100 °C	■	■
Eppendorf SmartBlock™ PCR 384	■	3,000 rpm	100 °C	■	■

¹⁾ Maximum mixing frequency is 2,000 rpm when lid is used. ²⁾ max. mixing frequency using DWP is 2,000 rpm. ³⁾ Only available with ThermoStat C

Ordering information

Description	Catalog No.	List USD
Eppendorf SmartBlock™ 0.5 mL, thermoblock for 24 reaction vessels 0.5 mL	5361000031	\$753.00
Eppendorf SmartBlock™ 1.5 mL, thermoblock for 24 reaction vessels 1.5 mL	5360000038	753.00
Eppendorf SmartBlock™ 2.0 mL, thermoblock for 24 reaction vessels 2.0 mL	5362000035	753.00
Eppendorf SmartBlock™ 5.0 mL, thermoblock for 8 Eppendorf Tubes® 5.0 mL, 8 x 5.0 mL reaction vessels	5309000007	753.00
Eppendorf SmartBlock™ 15 mL, thermoblock for 8 conical tubes 15 mL	5366000021	753.00
Eppendorf SmartBlock™ 50 mL, thermoblock for 4 conical tubes 50 mL	5365000028	753.00
Eppendorf SmartBlock™ 12 mm, thermoblock for 24 reaction vessels, diameter 11 mm – 11.9 mm, height 30 mm – 76 mm	5364000024	753.00
Eppendorf SmartBlock™ cryo, thermoblock for 24 cryo tubes, 1.5 mL – 2 mL, max. external diameter 12.5 mm, all base designs	5367000025	753.00
Eppendorf SmartBlock™ PCR 384, thermoblock for PCR plates 384, incl. lid	5307000000	997.00
Eppendorf SmartBlock™ PCR 96, thermoblock for PCR plates 96, incl. lid	5306000006	997.00
Eppendorf SmartBlock™ plates, thermoblock for microplates and deepwell plates, incl. lid	5363000039	997.00
Lid, for Eppendorf ThermoMixer® F0.5 / F1.5 / F2.0 and FP, for Eppendorf SmartBlock™ 0.5 – 2.0 mL, plates, PCR 96 and 384, DWP	5363000233	180.00

Eppendorf ThermoTop®

ACCESSORIES



Description

Now you can control the temperature of your samples with ease: the new ThermoTop, with unique **condens.protect®** technology, reliably prevents the formation of condensate on the tube lid and tube wall. Operation is simple, intuitive and does not require an additional cable connection. When the ThermoTop is placed on the device, it begins heating immediately. The temperature optimally adapts to the test temperature to ensure that it does not negatively affect the sample: optimal sample protection with optimal reaction conditions produce optimal results.

Applications

- > All temperature control procedures for which the formation of condensation on the tube lid and wall should be reliably avoided

Product features

- > Efficient and reliable prevention of condensation on the tube lid and wall
- > Guarantees constant reaction conditions for optimal enzymatic performance
- > Improves handling times, tubes don't have to be spun down at the end of the incubation
- > ThermoTop improves temperature homogeneity in the reaction vessel
- > Simple, wireless handling with automatic recognition, initialization, and operation



When the ThermoTop is placed on the device, it begins heating immediately. The temperature optimally adapts to the test temperature to minimize negative temperature effects within the sample.



The ThermoTop is compatible with the Eppendorf ThermoMixer C, ThermoStat C, and ThermoMixer F0.5 / F1.5 / F2.0 / FP. Combined with the Eppendorf ThermoMixer C and ThermoStat C, the ThermoTop can be used with thermoblocks for plates and lab vessels with a volume up to 2 mL. Compatible thermoblocks feature the condens.protect symbol.



Advantages of condensation prevention during incubation
Evaporation of H₂O and condensation on the tube lid changes the buffer concentration in the reaction. Enzymatic reactions can no longer run under optimal conditions.



Use of the Eppendorf ThermoTop effectively prevents the formation of condensate, thus guaranteeing optimal reaction conditions. Vessels no longer need to be spun down at the end of incubation which saves handling time.

Ordering information

Description	Catalog No.	List USD
Eppendorf ThermoTop®, with condens.protect® technology	5308000003	\$663.00

ACCESSORIES

Eppendorf ThermoMixer® F



Description

To simplify your lab routines. Whether you regularly work with 0.5/1.5/2.0 mL reaction vessels or plates (MTP and DWP) - the customized systems from Eppendorf offer you the perfect solution for your special applications. The devices combine precise heating and mixing with the highest stability, even at maximum mixing frequency. You can also carry out independent mixing and incubation steps.

Applications

- > Growth of bacteria and yeasts
- > Enzymatic reactions
- > Transformation of bacteria strains and plasmids
- > Denaturation of DNA, RNA, and proteins
- > Lysis reactions at 100 °C
- > Labeling of nucleic acids and proteins
- > Proteinase K digestion of cells and tissues
- > Resuspension of pellets
- > Mixing protein quantification assays
- > ELISA assays

Product features

- > Heating and mixing in 0.5/1.5/2.0 mL reaction vessels (F0.5/F1.5/F2.0) or plates (FP)
- > Efficient mixing up to 1,500 rpm (F1.5/F2.0) or 2,000 rpm (F0.5/FP)
- > Excellent mixing performance due to unique ^{2D}Mix-Control technology
- > Anti-spill technology prevents lid wetting and cross-contamination
- > Reliable prevention of condensate formation with the new ThermoTop (**condens.protect®**)
- > Simple and intuitive operation using predefined temperature keys (37 °C, 42 °C, 56 °C, and 95 °C)
- > Very quiet operation via precise fit of vessels in block
- > Heat-insulated Eppendorf SmartBlocks for ergonomic operation - you won't burn your fingers

i For more information go to www.eppendorf.com/thermomixer-f



Use the ThermoTop for efficient and reliable prevention of condensation on the tube lid and wall

Technical specifications				
Model	Eppendorf ThermoMixer® F0.5	Eppendorf ThermoMixer® F1.5	Eppendorf ThermoMixer® F2.0	Eppendorf ThermoMixer® FP
Max. speed	2,000 rpm	1,500 rpm	1,500 rpm	2,000 rpm
Timer	-	-	-	-
Heating rate	Max. 15 °C/min	Max. 11 °C/min	Max. 13 °C/min	Max. 18 °C/min
Cooling rate	-	-	-	-
Interfaces	USB interface	USB interface	USB interface	USB interface
Power supply	100 – 130 V, 50 – 60 Hz	100 – 130 V, 50 – 60 Hz	100 – 130 V, 50 – 60 Hz	100 – 130 V, 50 – 60 Hz
Max. power consumption	200 W	200 W	200 W	200 W
Dimensions (W x D x H)	8.1 x 11.9 x 6.4 in / 20.6 x 30.4 x 16.3 cm	8.1 x 11.9 x 6.7 in / 20.6 x 30.4 x 17.0 cm	8.1 x 11.9 x 6.7 in / 20.6 x 30.4 x 17.0 cm	8.1 x 11.9 x 6.4 in / 20.6 x 30.4 x 16.4 cm
Weight w/o accessories	13.6 lb / 6.2 kg	13.8 lb / 6.3 kg	13.8 lb / 6.3 kg	13.4 lb / 6.1 kg
Temperature range	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C	Min: 4 °C above RT, max: 100 °C
Mixing and vortexing radius	1.5 mm	1.5 mm	1.5 mm	1.5 mm
Mixing orbit	3 mm	3 mm	3 mm	3 mm
Mixing frequency	300-2,000 rpm	300-1,500 rpm	300-1,500 rpm	300-2,000 rpm
Temperature accuracy	Max. ±0.5 °C at 20–45 °C	Max. ±0.5 °C at 20–45 °C	Max. ±0.5 °C at 20–45 °C	Max. ±1 °C at 20–45 °C
Temperature settings	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C

Ordering information		
Description	Catalog No.	List USD
Eppendorf ThermoMixer® FP, with thermoblock for microplates and deepwell plates, including lid, 100 – 130 V/50 – 60 Hz	5385000024	\$3,050.00
Eppendorf ThermoMixer® F0.5, with thermoblock for 24 reaction vessels 0.5 mL, 100 – 130 V/50 – 60 Hz	5386000028	2,910.00
Eppendorf ThermoMixer® F1.5, with thermoblock for 24 reaction vessels 1.5 mL, 100 – 130 V/50 – 60 Hz	5384000020	2,810.00
Eppendorf ThermoMixer® F2.0, with thermoblock for 24 reaction vessels 2.0 mL, 100 – 130 V/50 – 60 Hz	5387000021	2,810.00
Eppendorf ThermoTop®, with condens.protect® technology	5308000003	663.00

MixMate®



The MixMate comes standard with tube holders for 0.5 mL, 1.5/2 mL, and 0.2 mL/96-well semi-skirted PCR plates for maximum flexibility with all common lab vessels.

Description

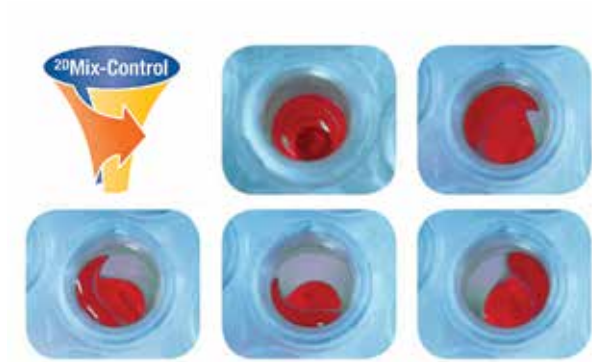
The MixMate is a compact and amazingly versatile mixer, specially designed for mixing small volumes (5 µL – 2 mL) in numerous plate and tube formats. The fast and precisely controlled mixing movements (2D Mix-Control) enable efficient and homogeneous mixing of samples in all vessel formats - allowing MixMate to be used for virtually any application. It accommodates micro test tubes, PCR plates, PCR strips, deepwell plates, and MTPs. The integrated touch vortex function, with minimal hand/arm vibration transfer (Eppendorf PhysioCare Concept®), completes this unique product profile. The innovative additional 2 second run timer allows vortexing your next sample without restarting.

Applications

- > Resuspending pellets (e.g., bacteria, DNA, cell culture pellets)
- > Mixing PCR setups
- > Mixing viscous liquids and suspensions (incl. beads)
- > Mixing restriction digestions
- > Immunoassays (e.g., ELISA)
- > Colorimetric assays (e.g., Bradford, Lowry, BCA)
- > Reporter gene assays (e.g. β-galactosidase, luciferase)
- > Vortexing numerous tube formats (e.g., 15 and 50 mL conical tubes)

Product features

- > High-speed mixer (3,000 rpm) for fast and efficient mixing of small volumes in all common vessel formats up to 2 mL
- > 2D Mix-Control technology (planar mixing orbit without vertical movement) for controlled mixing and reproducible results in seconds
- > Anti-spill technology for controlled mixing movements without lid wetting and cross-contamination
- > Plate holder provides easy operation and secure fit for all plate formats (MTP, DWP and PCR plates)
- > Efficiently mixes plates from 96 to 384 wells
- > Tube holders enable mixing of semi- and unskirted PCR plates as well as micro test tubes up to 2 mL
- > Easy to use thanks to 5 soft keys with pre-defined most common used mixing parameters
- > Minimal hand/arm vibration transfer during vortexing (certificate available) for ergonomic operation
- > Whisper quiet operation to benefit the work environment
- > Very stable - remains stationary even at maximum mixing speed



Time-lapse photography of controlled mixing with MixMate. The unique 2D Mix-Control technology mixes liquids in a very controlled, circular movement. The lack of chaotic splashing enables mixing without lid wetting or cross contamination.

	Plate type	96-well plates	384-well plates
Mixing of different buffers			
Buffer with detergent	PCR	15 s 1,800 rpm	45 s 2,800 rpm
Buffer without detergent	PCR	30 s 2,100 rpm	30 s 3,000 rpm
Buffer with high salt concentration	DWP	5 s 1,400 rpm	1 min 2,000 rpm
Buffer with DMSO	MTP	5 s 1,100 rpm	5 s 2,200 rpm
Mixing of viscous solutions			
Genomic-DNA	PCR	30 s 2,000 rpm	45 s 3,000 rpm
Resuspension of pellets			
Bacteria cell pellets	DWP	30 s 2,000 rpm	3 min 2,000 rpm

MixMate provides enough mixing power to handle the most challenging mixing tasks. Most samples are efficiently mixed within less than a minute independent of vessel geometry or sample properties. For more information see AppNote 130.

Technical specifications	
Model	MixMate®
Sample capacity	max. 96 x 0.2 mL, 24 x 0.5 mL, 24 x 1.5 mL, 24 x 2.0 mL, 1 x DWP or 1 x PCR plate
Timer	15 s–99.3 h, continuous
Noise level	< 50 dB(A)
Heating rate	-
Cooling rate	-
Interfaces	-
Max. power consumption	40 W
Dimensions (W x D x H)	6.7 x 9 x 5.1 in / 17 x 23 x 13 cm
Weight w/o accessories	9.2 lb / 4.2 kg
Temperature range	N/A
Mixing and vortexing radius	1.5 mm
Mixing orbit	3 mm
Mixing frequency	300 – 3,000 rpm
Temperature accuracy	-
Temperature settings	-
Touch vortex frequency	3,500 rpm

Ordering information		
Description	Catalog No.	List USD
MixMate®, incl. 3 tube holders: PCR 96, 0.5 mL, 1.5/2.0 mL, 100 – 130 V/50 – 60 Hz	022674200	\$2,280.00
Tube Holder 0.5 mL, for 24 x 0.5 mL reaction vessels	022674021	48.80
Tube Holder 1.5/2.0 mL, for 24 x 1.5 mL or 2.0 mL reaction vessels	022674048	48.80
Tube Holder PCR 96, for 96 x 0.2 mL PCR tubes, PCR strips or 1 x 96-well PCR plate, semi-skirted or unskirted	022674005	48.80

i For more information go to www.eppendorf.com/temperaturecontrol-mixing

Exchangeable Thermoblocks



Exchangeable thermoblocks for Eppendorf ThermoMixer comfort and ThermoStat plus™ accommodate:

- A. MTPs and deepwell plates
- B. 4 x 50 mL conical tubes
- C. 8 x 15 mL conical tubes
- D. Exclusively for ThermoStat plus: CombiBox provides universal temperature control (e.g., for the preparation/cooling of enzymes) for flasks and beakers with a height = 60 mm

- E. Adapter plate for 96 x 0.2 mL PCR tubes and PCR plates 96 easily inserts into exchangeable thermoblock for MTPs (B)
- F. 24 x 1.5–2 mL cryo tubes
- G. Test tubes with a diameter of 11–11.9 mm and a height of 30–76 mm
- H. 24 x 0.5 mL, 1.5 mL and 2.0 mL microcentrifuge tubes*¹
- I. 1–4 standard glass slides

*¹ Includes an IsoTherm rack and IsoTherm cool pack for 0 °C.

Description

The exchangeable thermoblock system for the Eppendorf ThermoMixer® comfort and ThermoStat plus ensures a precise “fit” for all common lab tubes: from simple temperature control of a chemical to complex enzyme reactions and hybridization experiments, and from MTPs to 50 mL conical tubes — the application possibilities are virtually endless!

Product features

- > A wide range of exchangeable thermoblocks to cover tubes from 0.2 mL to 50 mL as well as plates and glass slides
- > Heat insulated thermoblocks for ergonomic and safe operation (no direct contact with hot surfaces - you won’t burn your fingers)
- > Dry incubation technology eliminates contamination risk associated with classical waterbath incubation
- > Simple replacement of thermoblocks
- > Tubes are easily accessible
- > Whisper quiet operation and optimal temperature transfer due to complete enclosure and custom fit of tubes in the exchangeable thermoblocks

i For more information go to www.eppendorf.com/temperaturecontrol-mixing

Technical Specifications	Max. temp.	Max. speed	Thermomixer R	Thermostat plus
Exchangeable thermoblocks				
for 24 x 0.5 mL reaction vessels	99 °C	1,500 rpm	■	■
for 24 x 1.5 mL reaction vessels	99 °C	1,400 rpm	■	■
for 24 x 2.0 mL reaction vessels	99 °C	1,400 rpm	■	■
for 8 x 5.0 mL Eppendorf Tubes®	99 °C	750 rpm	■	■
for 8 x 15 mL conical tubes	99 °C	750 rpm	■	■
for 4 x 50 mL conical tubes	99 °C	750 rpm	■	■
Thermoblock for MTPs and deepwell plates				
with lid	99 °C	1,400 rpm ¹⁾	■	■
Thermoblock for 24 test tubes				
diameter 11 – 11.9 mm, height 30 – 76 mm	99 °C	1,400 rpm	■	■
Thermoblock for 24 cryo tubes				
1.5 – 2 mL, diameter max. 12.5 mm, all base shapes	99 °C	1,400 rpm	■	■
Exchangeable thermoblock				
for 4 slides	99 °C	1,400 rpm	■	■
CombiBox for all tube types				
interior 13.5 x 9.0 x 6.0 cm (W x D x H), only for ThermoStat plus	99 °C	0 rpm	–	■

¹⁾ with a load of, e.g. 200 g, the max. speed is 800 rpm

Ordering information

Description	Catalog No.	List USD
Exchangeable thermoblocks , for 24 reaction vessels, complete with rack and cool pack 0 °C (from IsoTherm-System®)		
for 24 x 0.5 mL reaction vessels	022670506	\$ 751.00
for 24 x 1.5 mL reaction vessels	022670522	751.00
for 24 x 2.0 mL reaction vessels	022670549	751.00
Exchangeable thermoblocks , for 8 Eppendorf Tubes®, for 8 x 5.0 mL Eppendorf Tubes®	5309000333	751.00
Exchangeable thermoblocks , for conical tubes		
for 8 x 15 mL conical tubes	022670531	751.00
for 4 x 50 mL conical tubes	022670514	751.00
CombiBox for all tube types , interior 13.5 x 9.0 x 6.0 cm (W x D x H), only for ThermoStat plus	022670603	976.00
Thermoblock for MTPs and deepwell plates , with lid	022670565	976.00
Adapter plate for 96 x 0.2 mL PCR tubes and PCR plates 96 , to insert in thermoblock for MTPs	022670573	323.00
Thermoblock for 24 test tubes , diameter 11 – 11.9 mm, height 30 – 76 mm	022670581	751.00
Thermoblock for 24 cryo tubes , 1.5 – 2 mL, diameter max. 12.5 mm, all base shapes	022670557	751.00
Exchangeable thermoblock , for 4 slides	022670590	1,100.00

IsoTherm-System®

COOLING



- Product features**
- > Ideal for cooling, transporting and storing deep-frozen samples
 - > Dry incubation technology eliminates contamination risk associated with classic ice bath incubation
 - > Holds 24 micro tubes (e.g., 0.5 mL or 1.5 mL/2.0 mL)
 - > Two versions of IsoPack (cold pack) available:
 - > White maintains 0 °C for up to 6 hours
 - > Blue maintains -21 °C for up to 3 hour
 - > No more melting ice baths, reduced risk of contamination
 - > All system components can be used separately
 - > Racks are stackable, autoclavable and can be centrifuged in the MTP rotor

Description
The IsoTherm-System, which consists of an IsoRack (work rack), IsoSafe (insulating box) and two IsoPacks (cool packs), specializes in cooling samples effectively and consistently at -21 °C or 0 °C over many hours. The IsoTherm-System can be used to prevent enzymes from becoming inactive as well as for PCR sample preparation, sample transport and slow thawing of frozen samples. Limited to Eppendorf ThermoMixer R and ThermoStat plus™.

Ordering information		
Description	Catalog No.	List USD
IsoTherm-System® starter set , includes IsoSafe, IsoRack, 0 °C IsoPack and -21 °C IsoPack for 0.5 mL tubes	022510002	\$169.00
IsoTherm-System starter set , includes IsoSafe, IsoRack, 0 °C IsoPack and -21 °C IsoPack for 1.5/2.0 mL tubes	022510053	169.00
IsoPack and IsoRack set , includes one IsoPack and one IsoRack		
for 0.5 mL vessels, 0 °C	022510282	53.20
for 0.5 mL vessels, -21 °C	022510291	53.20
for 1.5/2.0 mL vessels, 0 °C	022510240	53.20
for 1.5/2.0 mL vessels, -21 °C	022510258	53.20
IsoRack , set of 4 racks		
for 0.5 mL vessels	022510100	134.00
for 1.5 mL/2.0 mL vessels	022510169	134.00
IsoSafe and IsoPack , includes 1 IsoSafe and 3 IsoPack		
for 0.5 mL vessels, 0 °C	022510142	169.00
for 0.5 mL vessels, -21 °C	022510185	101.00
for 1.5/2.0 mL vessels, 0 °C	022510207	101.00
for 1.5/2.0 mL vessels, -21 °C	022510223	169.00

i For more information go to www.eppendorf.com/IsoTherm

Product appearance, specifications, and/or prices are subject to change without notice.

PCR-Cooler

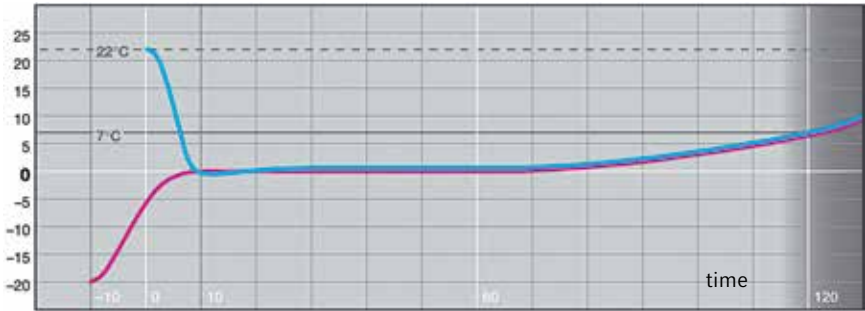
COOLING



- Product features**
- > For the protection, transport, and storage of sensitive samples, as well as for safely stopping reactions
 - > Ideal for PCR reaction setup
 - > Accommodates 96-well PCR plates, PCR strips and 0.2 mL and 0.5 mL PCR tubes
 - > Dry incubation technology eliminates contamination risk associated with classic ice bath incubation
 - > Keeps an entire 96-well PCR plate cold for more than an hour at 0 °C (with two-hour precooling at -20 °C)
 - > Features temperature indication: Color of the PCR cooler changes when temperature exceeds 7 °C (violet or dark blue when ice cold, pink or light blue when above 7 °C)
 - > Space-saving and stackable
 - > Special contour design prohibits freezing of samples

Description
Add some color to your sample preparation! The Eppendorf PCR-Cooler contains a temperature indicator that changes the color of the PCR-Cooler from violet to pink or dark blue to light blue when its temperature exceeds 7 °C. The Eppendorf PCR-Cooler is ideal for setting up PCR reactions in 0.2 mL and 0.5 mL PCR tubes as well as 96-well PCR plates.

Cooling curve
Temperature behavior of a pre-cooled PCR-Cooler and a sample inserted at room temperature (the background color indicates the color change)



Ordering information		
Description	Catalog No.	List USD
PCR-Cooler 0.2 mL Starter Set , (1 x pink, 1 x blue)	022510509	\$147.00
PCR-Cooler 0.2 mL , Pink	022510541	75.90
PCR-Cooler 0.2 mL , Blue	022510525	75.90

Vacufrage® plus centrifugal vacuum concentrator



Description

The Vacufrage plus with its new design was designed with the customer in mind to deliver an ergonomic, intuitive and durable solution that fits comfortably right on the lab bench. An advanced heating technology provides best treatment for your sample which assures quick, efficient and gentle vacuum concentration of DNA/RNA, nucleotides, proteins and other liquid or wet samples. Our new coated lid provides superior chemical resistance against aggressive acids and organic solvents (e.g. TFA, DMSO). The Vacufrage plus is available with three configurations to meet the customers' lab specific needs: 1) Basic Concentrator for connecting to an existing vacuum pump 2) Complete system with an integrated solvent-resistant, maintenance and oil-free PTFE pump, and condensation trap 3) Complete system with vacuum port adds extra capability. It allows for using the integrated vacuum pump separately - without having to disconnect it from the system

Product features

- > Comes in 3 system configurations
- > Extremely quiet operation <50 dB(A)
- > Chemical-resistant, maintenance-free PTFE diaphragm pump eliminates the need for changing pump oil
- > Small footprint saves valuable bench space
- > Wide variety of 15 different rotor options to accommodate tubes from 0.2 mL to 50 mL, microplates and PCR plates
- > Motorless induction drive and chemical-resistant, stainless steel chamber for trouble-free operation
- > Can be connected to most commercially available cold traps for use with vapors
- > **New:** Coated lid with superior chemical resistance
- > **Coming Soon:** Rotor for Eppendorf Tubes® 5.0 mL



Concentrator junction system

The complete "junction" system adds extra capability/ flexibility. It allows you to use the integrated vacuum pump separately – without having to disconnect it from the system; simply connect the port to any external device that requires vacuum (e.g. gel dryer).



Easy-to-use

- > Timer selection between 1 min and 9:59 as well as brake function
- > Temperature preselection: room temperature, 30 °C, 45 °C and 60 °C
- > Mode/vent function: choose between three solvent modes
- > Start/Stop of concentration process

Technical specifications			
Model	Vacufrage plus basic	Vacufrage plus system	Vacufrage plus system w/port
Vacuum	–	20 hPa (20 mbar)	20 hPa (20 mbar)
Fixed speed	1,400 rpm	1,400 rpm	1,400 rpm
Tube volume	0.2 – 50 mL	0.2 – 50 mL	0.2 – 50 mL
Sample capacity	Max. 144 vessels/2 microplates	Max. 144 vessels/2 microplates	Max. 144 vessels/2 microplates
Port to connect external devices to vacuum pump	no	no	yes
Max. power consumption	150 W	350 W	350 W
Dimensions (W × D × H)	12.6 × 14.5 × 9 in / 33 × 37 × 23 cm	12.6 × 21 × 11.7 in / 33 × 58 × 29 cm	12.6 × 21 × 11.7 in / 33 × 58 × 29 cm
Weight w/o accessories	37.4 lb / 16.5 kg	68.2 lb / 31.5 kg	68.2 lb / 31.5 kg

Rotors for Vacufuge® plus



48 x 1.5/2.0 mL (F-45-48-11)

- > Rotor for 48 x 1.5/2.0 mL microcentrifuge tubes
- > A spacer enables additional stacking (double capacity)



8 x 15 mL conical (F-45-8-11)

- > Rotor for 8 x 15 mL conical tubes



6 x 50 mL conical (F-35-6-30)

- > Rotor for 6 x 50 mL conical tubes
- > Also accommodates 6 x 15 mL conical tubes



2 x MTP/PCR plate (A-2-VC)

- > For use with MTP, PCR and Deepwell plates up to 27 mm high
- > A work tray with frame is available for PCR test plates and microplates without frames
- > Rotor can be autoclaved for 20 min. at 121°
- > Suitable for the CombiSlide Adapter

Ordering information

	Description	Max. tube dimensions Ø x L	Sample capacity	Catalog No.	List USD
	Rotor F-45-72-8	8 x 31 mm ¹⁾	72 x 0.5 mL	022822080	\$ 779.00
	Rotor F-45-70-11	11 x 41/47 mm	70 x 1.5 mL, 70 x 2.0 mL	022822047	779.00
	Rotor F-45-48-11	11 x 41/47 mm ¹⁾	48 x 1.5 mL / 2.0 mL	022822004	779.00
	Rotor F-40-36-12	12 x 32 mm	36 x 1.5 mL	022822209	779.00
	Rotor F-45-36-15	15 x 45 – 48 mm ²⁾	36 x 3.0/5.0 mL	022822128	779.00
	Rotor F-45-16-20	20 x 42 – 55 mm ²⁾	16 x 6.5/10 mL	022822136	779.00
	Rotor F-40-18-19	19 x 66 mm	18 x 10 mL	022822161	779.00
	Rotor F-45-12-31	31 x 55 mm	12 x 20 mL	022822217	779.00
	Rotor F-35-8-24	24 x 86 – 105 mm ²⁾	8 x 25 mL	022822187	779.00
	Rotor F-45-24-12	12 x 67 – 100 mm ^{2) 3)}	24 x 5 – 7 mL	022822144	779.00
	Rotor F-50-8-16	16 x 105 – 120 mm ²⁾	8 x 8 – 12 mL	022822233	779.00
	Rotor F-50-8-18	18 x 105 – 128 mm ²⁾	8 x 10 – 18 mL	022822179	779.00
	Rotor F-45-8-17	17 x 116 – 123 mm ²⁾	8 x 15 mL conical tubes	022822225	779.00
	Rotor F-35-6-30	17 x 116 – 123 mm or 30 x 116 – 123 mm ²⁾	6 x 15 mL conical tubes or 6 x 50 mL conical tubes	022822228	779.00
	Rotor A-2-VC	128 x 86 x 27 mm	2 x MTP or skirted PCR plates 2 x Deepwell plates (DWP) (max. height = 27 mm)	022822241	1,270.00

¹⁾ Rotor is stackable for double capacity using spacer 5301 316.005.null²⁾ Min./max. tube length.null³⁾ Tube length = 75 mm: max capacity 24 tubes, tube length > 75 mm: max capacity 12 tubes.

Ordering information

Description	Catalog No.	List USD
Vacufuge® plus basic device		
120 V/50–60 Hz, with Rotor F-45-48-11	022820001	\$ 5,230.00
Vacufuge plus complete system		
120 V/50–60 Hz, with integrated diaphragm vacuum pump, with Rotor F-45-48-11	022820109	10,070.00
120 V/50–60 Hz, with integrated diaphragm vacuum pump, without rotor	022822993	9,270.00
120 V/50–60 Hz, with integrated diaphragm vacuum pump; with connection, e.g., for a gel dryer; without rotor	022820168	11,300.00
Condensation trap	022830309	736.00
Hose for connecting condensation trap to Vacufuge	022830295	69.00
External Power Cable ¹	022830110	120.00
External Vacuum Control Cable and Solenoid ² , 120 V	022830112	384.00
Adapter , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20
Adapter , for 1 PCR tube 0.2 mL, for Rotor F-45-72-8, set of 6 pcs.	022636286	34.20
CombiSlide® Adapter , for 12 slides, for plate rotors, set of 2 pcs.	022638963	267.00
Rotor spacer , required for stacking rotors F-45-72-8 and F-45-48-11	022822101	58.40
Work tray , for semi-/unskirted PCR plates, PCR strips and 0.2 mL PCR tubes, for Rotor A-2-VC, set of 10 pcs.	951010031	49.00
Frame for work tray , for Rotor A-2-VC, set of 5 pcs.	951010049	44.90

¹ Attaches directly from the Basic concentrator to power an external vacuum pump (< 400 Watts). Concentrator automatically powers on/off pump as needed for vacuum.
² Allows the Basic concentrator to control and turn on/off the incoming vacuum line. Powered solenoid attaches in-line with the vacuum line. For use with vacuum pumps > 400 Watts.



Sample Preparation Instrument Performance Plans



Preventive Maintenance

The Sample Preparation Instrument Performance Plans offer a choice of preventive maintenance services for consistent instrument performance and confidence in results.

Preventive Maintenance	Catalog No.	List USD
Vacufuge® (Complete system)	901510664	\$437.00
Vacufuge (Basic system)	901510662	274.00

Extended Warranty

Your new Eppendorf instrument comes with a 2-year warranty which covers all parts and labor should the system ever need repair. When you purchase your instrument or when the warranty period is over¹ you may also purchase additional years of warranty coverage. Customers are responsible for instrument return costs to a service center and Eppendorf will pay for the return. Zone travel charges will apply when Field Service is requested.

1-year Extended Warranty	Catalog No.	List USD
ThermoMixer®/Stat	901513556	\$ 350.00
Vacufuge® (Complete system)	901510672	1,219.00
Vacufuge (Basic system)	901510648	633.00

¹ An extended warranty can be purchased during the manufacturer's warranty period. Instruments that are no longer under manufacturer's warranty require a preventive maintenance evaluation before an extended warranty can be purchased.

Certification Services

Installation Qualification (IQ) and Operational Qualification (OQ) certification services ensure your Quality Management requirements are fulfilled, providing you with qualified assurance that your instrument is functioning correctly, in accordance with manufacturer's specifications.

Certification Services	Catalog No.	List USD
Vacufuge (Complete system)	901510692	\$1,188.00
Vacufuge (Basic system)	901510690	980.00

Product appearance, specifications, and/or prices are subject to change without notice.



Temperature Validation/Calibration

The performance of the system's heating block will be verified against manufacturer's specifications. A calibration, if required, and subsequent temperature validation will be performed. The report provides the instrument's temperature profile as per manufacturer's specifications. An initialed and dated service label will be affixed to the instrument upon completion of this service.

Temperature Validation	Catalog No.	List USD
ThermoMixer®/Stat	901510668	\$270.00

Flat Fee Repair

An easy to use value packaged service option when a repair is needed for systems not covered under a warranty or extended warranty. All it takes is one call to our Customer Service and for a single fee we will repair the instrument, complete a full preventive maintenance, repair anything else we find, plus include a full year warranty on the whole system, not just the repair. Instrument return shipment is also included.

Flat Fee Repair	Catalog No.	List USD
ThermoMixer®/Stat	901513558	\$ 900.00
Vacufuge (Complete system)	901520042	2,616.00
Vacufuge (Basic system)	901520040	1,360.00

Performance Plans	ESSENTIAL CHECK	ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
Order Number	0082100003	0082100004	0082100005	0082100007	0082100008
List USD	\$85.00	\$175.00	\$1,000.00	\$700.00	\$300.00
External Checks & Maintenance					
Cleaning of housing		■	■		
Visual check of housing	■	■	■		
Visual check of plate holder		■	■		
Cleaning of accessories		■	■		
Visual check of accessories	■	■	■		
Internal Equipment & Fittings					
Cleaning of internal parts and assemblies		■	■		
Visual check of internal parts and assemblies		■	■		
Visual check of electrical connection		■	■		
Functional check					
Check of delivery				■	
Instrument set-up and initial operation				■	
Instruction of user				■	
LED, display, and keyboard check		■	■		
Check of vortex sensor		■	■		
Functional check with service functions		■	■		
Check of SmartBlock or exchangeable thermoblock detection	■	■	■		■
Check of mixing, heating, cooling, and vortexing**	■	■	■		
Check and measurement of mixing, heating, cooling, and vortexing					■
Check of overload protection		■	■		
Check of fans		■	■		
Check of ThermoTop detection		■	■		
Check of timer					■
Memory					
Evaluation of stored data	■	■	■		
Documentation					
Check list provided	■	■	■		
Dated service sticker to confirm Eppendorf service	■	■	■	■	■
IQ Report and Certificate				■	
OQ Report and Certificate					■
Supporting Information					
Contract period	one year	one year	one year	N/A	N/A
Number of routine service visits included	one	one	one	N/A	N/A
Costs of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired; includes travel cost)	not included	not included	included	N/A	N/A

Additional order number for combined Installation and Operational Qualification (IQ/OQ) services: 0082100009 (\$800.00)
Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.

* Please contact your local Eppendorf Service representative for details of discounts and/or any potential additional charges applying. ** Without measurement
Scope of service depends on device configuration





Description	Flex-Tube®	Safe-Lock Tube 0.5 mL	Safe-Lock Tube 1.5 mL
Page	161	163	163
Volume	1.5 mL	0.5 mL	1.5 mL
Bottom shape	conical	conical	conical
Max. RCF Eppendorf Quality™	30,000 x g	30,000 x g	30,000 x g
Max. RCF PCR clean	30,000 x g	30,000 x g	30,000 x g
Max. RCF Eppendorf Biopur®	–	22,000 x g	22,000 x g
Max. RCF Sterile	–	–	–

¹⁾ Test conditions: Rotor FA-45-6-30 in Eppendorf Centrifuge 5810 R (using a suitable centrifuge adapter for 15 mL tube), sample: saline solution (density: 1.0 g/mL), controlled centrifugation temp.: 25 °C, centrifugation time: 90 min



Description	Protein LoBind, 0.5 mL/ DNA LoBind, 0.5 mL	Protein LoBind, 1.5 mL/ DNA LoBind, 1.5 mL	Protein LoBind, 2.0 mL/ DNA LoBind, 2.0 mL
Page	169	169	169
Bottom shape	conical	conical	round
Max. RCF PCR clean	18,000 x g/ 30,000 x g	18,000 x g/ 30,000 x g	18,000 x g/ 25,000 x g

i For more information go to www.eppendorf.com/consumables



Safe-Lock Tube 2.0 mL	Eppendorf Tubes® 5.0 mL	Eppendorf Conical Tubes 15 mL	Eppendorf Conical Tubes 50 mL
163	164	168	168
2.0 mL	5.0 mL	15 mL	50 mL
round	conical	conical	conical
25,000 x g	25,000 x g	–	–
25,000 x g	25,000 x g	–	–
22,000 x g	25,000 x g	–	–
–	25,000 x g	19,500 x g ¹⁾	19,500 x g ¹⁾



Protein LoBind, 5.0 mL/ DNA LoBind, 5.0 mL	Protein LoBind, 15 mL/ DNA LoBind, 15 mL	Protein LoBind, 50 mL/ DNA LoBind, 50 mL
167	169	169
conical	conical	conical
25,000 x g/ 25,000 x g	Inquire	Inquire



Microplates			
Description	MTP 96/F	MTP 96/U	MTP 96/V
Page	171	171	171
Number of wells	96 wells	96 wells	96 wells
Total volume	400 µL	360 µL	350 µL
Work volume	50-350 µL	20-320 µL	20-300 µL
Material	polypropylene	polypropylene	polypropylene
Bottom shape	flat	round	conical
Dimensions (W × D × H)	127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 14.4 mm
Max. RCF	6,000 x g	6,000 x g	6,000 x g



Deepwell Plates				
Description	DWP 96/500	DWP 96/1,000	DWP 96/2,000	DWP 384/200
Page	175	175	175	175
Number of wells	96 wells	96 wells	96 wells	384 wells
Total volume	700 µL	1,200 µL	2,400 µL	240 µL
Work volume	30-550 µL	30-1,000 µL	50-2,000 µL	20-225 µL
Material	polypropylene	polypropylene	polypropylene	polypropylene
Bottom shape	conical	conical	conical	conical
Dimensions (W × D × H)	127.8 × 85.5 × 27.1 mm	127.8 × 85.5 × 44.1 mm	127.8 × 85.5 × 44.1 mm	127.8 × 85.5 × 25.1 mm
Max. RCF	6,000 x g	6,000 x g	6,000 x g	6,000 x g

i For more information go to www.eppendorf.com/consumables

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com



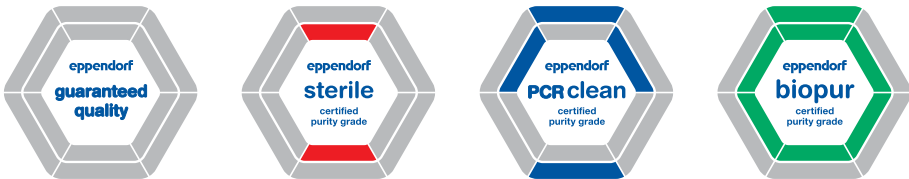
Microplates			
MTP 384/F	MTP 384/V	MTP UV-VIS 96/F	MTP VIS 96/F
171	171	173	173
384 wells	384 wells	96 wells	96 wells
150 µL	140 µL	400 µL	400 µL
10-120 µL	10-120 µL	50-350 µL	50-350 µL
polypropylene	polypropylene	polystyrene/film	polystyrene
flat	conical	flat	flat
127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 14.4 mm
6,000 x g	6,000 x g	300 x g	3,000 x g



Protein LoBind Plates/ DNA LoBind Plates					
MTP 96/V	MTP 384/V	DWP 96/500	DWP 96/1000	DWP 96/2000	DWP 384/200
171	171	175	175	175	175
96 wells	384 wells	96 wells	96 wells	96 wells	384 wells
350 µL	140 µL	700 µL	1,200 µL	2,400 µL	240 µL
20-300 µL	5-120 µL	30-550 µL	30-1000 µL	50-2000 µL	20-225 µL
polypropylene	polypropylene	polypropylene	polypropylene	polypropylene	polypropylene
conical	conical	conical	conical	conical	conical
127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 14.4 mm	127.8 × 85.5 × 27.1 mm	127.8 × 85.5 × 44.1 mm	127.8 × 85.5 × 600 cm	127.8 × 85.5 × 25.1 mm
6,000 x g	6,000 x g	6,000 x g	6,000 x g	6,000 x g	6,000 x g

Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com

Eppendorf Purity Grades for Tubes and Plates



Eppendorf sample handling consumables stand for highest quality and purity.

Our tubes and plates are available in a variety of purity grades (see table below). The purity grades “sterile”,

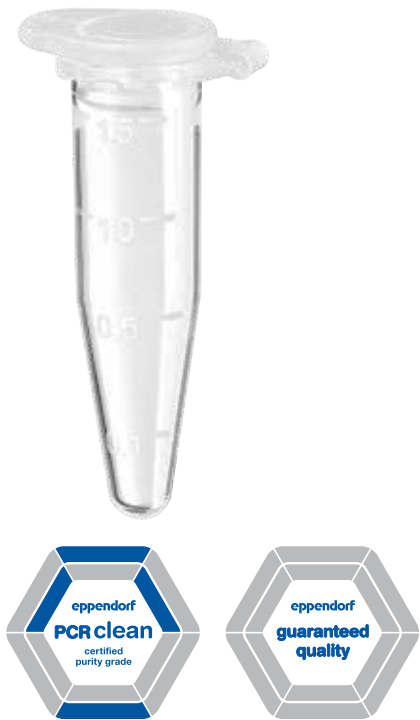
“protein-free”, “PCR clean” and “Biopur®” are tested and certified by an accredited external lab. As a special service, we make the inspection certificate for each delivered lot available online (www.eppendorf.com/certificates).

Purity grades				
Eppendorf purity grades for tubes and plates	Eppendorf Quality™	Eppendorf sterile	Eppendorf PCR clean	Eppendorf Biopur®
Continuous quality control for the following relevant criteria:				
Function, tightness,precision	■	■	■	■
Low wetting	■	■	■	■
High chemical resistance	■	■	■	■
High thermal resistance	■	■	■	■
High resistance to centrifugation forces*1	■	■	■	■
High transparency	■	■	■	■
Precisely shaped	■	■	■	■
Lot testing*2 (certified) for the following purity criteria:				
Pyrogen-free (endotoxin-free)		■		■
Sterile (Ph.Eur./USP)		■		■
Human DNA-free			■	■
DNA-free (Human- + bacteria DNA)				■
DNase-free			■	■
RNase-free			■	■
PCR-inhibitor-free			■	■
ATP-free				■
Eppendorf tubes				
Safe-Lock Tubes	■		■	■*3
3810X	■		■	
Eppendorf Tubes® 5.0 mL	■	■	■	■*3
Conical Tubes 15 mL and 50 mL		■*4		
DNA + Protein LoBind Tubes			■	
PCR Tubes (PCR + real-time PCR)			■	
Cap Strips (PCR + real-time PCR)			■	
Eppendorf plates and accessories				
Deepwell Plates + Microplates		■	■	
Protein LoBind Deepwell Plates			■	
DNA LoBind Deepwell Plates			■	
Eppendorf twin.tec® PCR Plates (PCR + real-time PCR)			■	
Eppendorf twin.tec® microbiology PCR Plates				■
Heat Sealing Film + Foil			■	
PCR Storage Films + Foils			■	
Plate Lid		■	■	

*1 For accurate details regarding resistance to centrifugation, please refer to the respective product pages. *2 Lot-specific certificate can be downloaded from www.eppendorf.com/certificates.

*3 Individually packaged. *4 Eppendorf sterile, RNase free, DNase free, DNA free (human and bacteria DNA)

Eppendorf Flex-Tube®



- Product features**
- > Tube lid is easy to open and close for ergonomic operation
 - > Polypropylene provides high resistance to chemicals, mechanical stress, and temperature extremes
 - > g-Safe®: Exceptional centrifugation stability up to 30,000 x g prevents sample loss due to tube breakage and provides extra safety when working with hazardous samples
 - > Manufactured without the use of slip agents, plasticizers, and biocides – substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
 - > Graduation for simple verification of the pipetted volume
 - > Frosted lid and surface on the side for easy labeling
 - > Guaranteed functionality from -86 °C to 100 °C
 - > Autoclavable when open (121 °C, 20 min)
 - > Available in PCR clean: Every lot is individually tested and certified for guaranteed purity

The Flex-Tube® guarantees tried and tested tight lid closure and easy, stress-free opening and closing.

Description

The easy-to-open, securely closing, Eppendorf Flex-Tube® offers comfort and dependability for sample preparation, centrifugation and storage. One vessel for all applications in molecular biology, clinical chemistry and biochemistry.

Safer than ever: Eppendorf Flex-Tube® can be centrifuged up to 30,000 x g without any problems!

Ordering information			
Description	Color	Catalog No.	List USD
Eppendorf Flex-Tubes®, 1.5 mL, g-safe® centrifugation stability			
Eppendorf Quality™, 500 pcs.	□ colorless	022364111	\$34.70
Eppendorf Quality™, 500 pcs.	■ blue	022363531	45.40
Eppendorf Quality™, 500 pcs.	■ yellow	022363590	45.40
Eppendorf Quality™, 500 pcs.	■ green	022363557	45.40
Eppendorf Quality™, 500 pcs.	■ red	022363573	45.40
Eppendorf Quality™, 500 pcs.	■ amber (light protection)	022363514	45.40
PCR clean, 500 pcs.	□ colorless	022364120	45.50

Eppendorf Safe-Lock Tubes

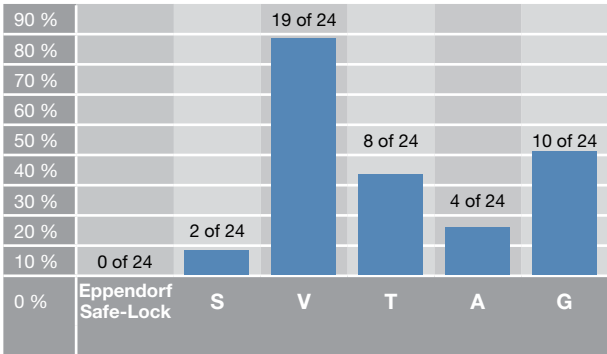


- Product features**
- > Hinged Eppendorf Safe-Lock lid prevents unintentional lid opening during incubation and storage
 - > Polypropylene provides high resistance to chemicals, mechanical stress and temperature extremes
 - > Manufactured without the use of slip agents, plasticizers, and biocides – substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
 - > g-Safe®: Exceptional centrifugation stability up to 30,000 x g prevents sample loss due to tube breakage and provides extra safety when working with hazardous samples
 - > Precise lid sealing for minimal evaporation rates during long-term storage
 - > Large frosted lid and surface on the side for easy labeling
 - > Guaranteed functionality from -86 °C to 100 °C
 - > Autoclavable when open (121 °C, 20 min)
 - > Available in lot-certified PCR clean and Biopur quality for guaranteed purity
 - > Available in Eppendorf Protein and DNA LoBind material for maximum recovery of valuable samples

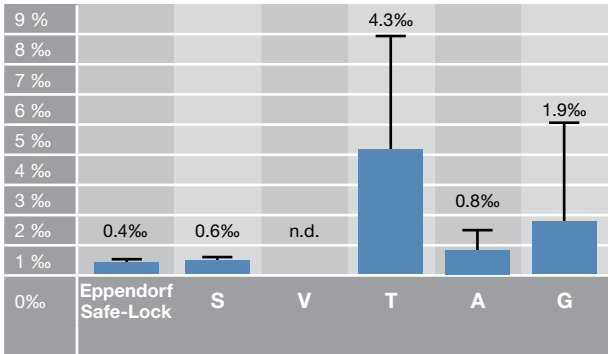
Description
Eppendorf Safe-Lock Tubes are the result of 50 years of continuous improvement and development. The original Safe-Lock tubes protect your sample with excellent centrifugation stability, feature perfect sealing properties, and reliably prevent sample evaporation. Trust in the original Eppendorf Safe-Lock Tubes, because your samples deserve nothing but the best. **Safer than ever!** Tests at 30,000 x g have shown that vessels can break during centrifugation. Eppendorf Tubes® are guaranteed to withstand forces up to 30,000 x g, allowing you to safely centrifuge without sample losses.

i For more information go to www.eppendorf.com/SafeLock

Product appearance, specifications, and/or prices are subject to change without notice.



Lid sealing:
Number of opened lids. Shown is the percentage of tubes that opened during a 30 min incubation at 100 °C in a water bath. Tubes filled with 1 mL aqueous solution. None of the Eppendorf Tube lids opened during the 30 min incubation at 100 °C.



Evaporation in %:
Evaporation tightness was tested by measuring the weight loss of tubes filled with 1 mL ethanol solution after a 1 h incubation at 70 °C. Shown are the mean values and standard deviation (n=24). Tubes from supplier V could not be measured as several tube lids popped open during the incubation step.

Ordering information			
Description		Catalog No.	List USD
Eppendorf Safe-Lock Tubes, 0.5 mL			
Eppendorf Quality™, 500 pcs.	□ colorless	022363611	\$54.00
Eppendorf Quality™, 500 pcs.	■ yellow	022363671	66.40
Eppendorf Quality™, 500 pcs.	■ red	022363662	66.40
Eppendorf Quality™, 500 pcs.	■ blue	022363646	66.40
Eppendorf Quality™, 500 pcs.	■ green	022363654	66.40
Eppendorf Quality™, 500 pcs.	■ amber (light protection)	022363638	66.40
Eppendorf Quality™, 500 pcs.	assorted colors (per 100 or 200)	022363697	66.40
PCR clean, 500 pcs.	□ colorless	022363719	73.80
Eppendorf Biopur®, 50 pcs., individually packed	□ colorless	022600001	34.40
Eppendorf Safe-Lock Tubes, 1.5 mL			
Eppendorf Quality™, 500 pcs.	□ colorless	022363204	50.30
Eppendorf Quality™, 500 pcs.	■ yellow	022363301	62.30
Eppendorf Quality™, 500 pcs.	■ red	022363280	62.30
Eppendorf Quality™, 500 pcs.	■ blue	022363247	62.30
Eppendorf Quality™, 500 pcs.	■ green	022363263	62.30
Eppendorf Quality™, 500 pcs.	■ amber (light protection)	022363221	62.30
Eppendorf Quality™, 500 pcs.	assorted colors (per 100 or 200)	022363328	62.30
PCR clean, 500 pcs.	□ colorless	022363212	70.60
Eppendorf Biopur®, 100 pcs., individually packed	□ colorless	022600028	49.80
Eppendorf Safe-Lock Tubes, 2.0 mL			
Eppendorf Quality™, 500 pcs.	□ colorless	022363352	54.00
Eppendorf Quality™, 500 pcs.	■ yellow	022363450	66.40
Eppendorf Quality™, 500 pcs.	■ red	022363433	66.40
Eppendorf Quality™, 500 pcs.	■ blue	022363395	66.40
Eppendorf Quality™, 500 pcs.	■ green	022363417	66.40
Eppendorf Quality™, 500 pcs.	■ amber (light protection)	022363379	66.40
Eppendorf Quality™, 500 pcs.	assorted colors (per 100 or 200)	022363476	66.40
PCR clean, 500 pcs.	□ colorless	022363344	73.80
Eppendorf Biopur®, 100 pcs., individually packed	□ colorless	022600044	57.10

Eppendorf Tubes® 5.0 mL



1. Ergonomic operation

Simple, practical and ergonomic single-hand operation of the snap cap tubes. The flattened and grooved sides of the screw cap supports a better grip and user-friendly handling.

2. Certified purity

Available in lot certified Eppendorf Quality, PCR clean, Sterile and Eppendorf Biopur® purity levels.

3. Centrifugation safety

High centrifugation stability for fast and efficient protocols.

4. Lid design

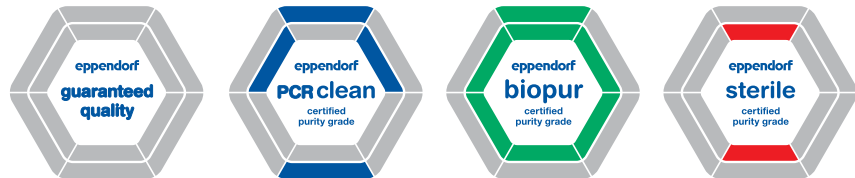
The choice between various snap cap and screw cap tube variants offers the optimal solution for almost all applications.

5. Material

Exceptionally high-quality, transparent polypropylene, free of plasticizers, biocides or mold release agents, for reliable test results.

6. Conical shape

Compatible with accessories for conical 15 mL tubes - many existing adapters and racks can be used.

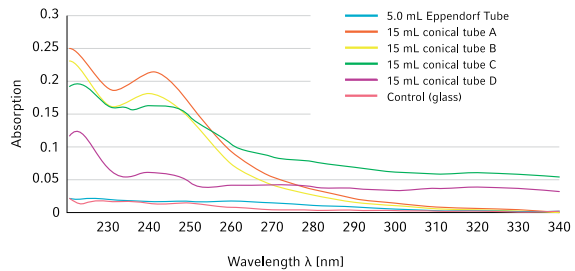
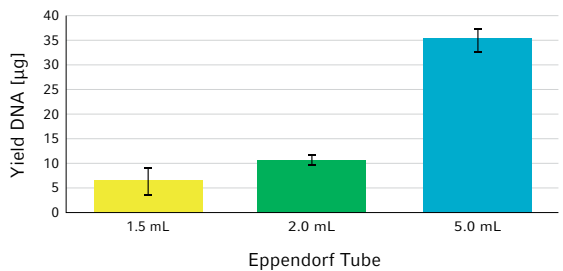


Description

Eppendorf Tubes are the benchmark for simple and safe sample preparation from 0.5 to 2.0 mL. For larger volumes, 15 mL and 50 mL conical tubes are available. With medium sample volumes you may face an issue: they need to be processed with large conical screw cap tubes - impractical, inconvenient and often prone to contamination. Eppendorf now offers the »missing link«: the Eppendorf Tube 5.0 mL. This product fills the gap between existing tube versions and enables the simple and safe processing of sample volumes up to 5.0 mL!

Applications

- > Easier processing of samples up to 5.0 mL
- > Higher yields in DNA isolation, especially with samples with limited quantity of source material
- > Convenient and safe cell culture applications
- > Easier sample access lowers the risk of contamination
- > Preparation of mastermixes and buffers
- > Less storage space needed
- > Safe cell and tissue lysis



Higher yields in DNA isolation – E.g. the yield of low-copy plasmid DNA can be significantly improved by increasing the culture volume to 5 mL. Data shown in the diagram was generated with 5.0 mL snap cap format - for additional information and protocol description please see Application Note 262.

Minimization of leachables

Conical 15 mL screw cap tubes, often used in the medium volume range, show contamination from leaching substances which absorb in the UV range and can thereby disrupt DNA and protein quantifications. The Eppendorf Tube 5.0 mL offers a safe alternative for sample preparation and storage. Data shown in the diagram was generated with 5.0 mL snap cap format - for additional information and a description of the protocol, see Application Note no. 264.

Eppendorf Tubes® 5.0 mL – System Accessories



Perfect mixing, heating and cooling with the ThermoMixer C



Safe centrifugation with Eppendorf Centrifuges



Easy integration in the epMotion automated pipetting system



The ideal solution for sample preparation and storage: new racks and storage boxes



Precise one-step pipetting with Eppendorf pipettes and epT.I.P.S.® 5.0 mL



Optimized adapters for existing swing-bucket and fixed-angle rotors

Description

Of course, the Eppendorf system concept is the focus for the new Eppendorf Tubes® 5.0 mL. All lab procedures can continue to be executed – simple, practical and cost effective. Eppendorf offers a sophisticated range of matching accessories. Efficient and simple pipetting, gentle mixing, incubating, safe centrifugation, automatic pipetting and storage down to –86 °C. All work perfectly with Eppendorf Tubes® 5.0 mL. The conical shape is designed to be compatible with most accessories for common conical 15 mL tubes. This allows you to continue using many of your existing adapters and racks!

Applications

- > Perfect mixing, heating and cooling with the ThermoMixer C
- > Safe centrifugation with Eppendorf Centrifuges
- > Easy integration in the epMotion automated pipetting system
- > The ideal solution for sample preparation and storage: new racks and storage boxes
- > Precise one-step pipetting with Eppendorf pipettes and epT.I.P.S.® 5.0 mL
- > Optimized adapters for existing swing-bucket and fixed-angle rotors
- > Safe cell and tissue lysis

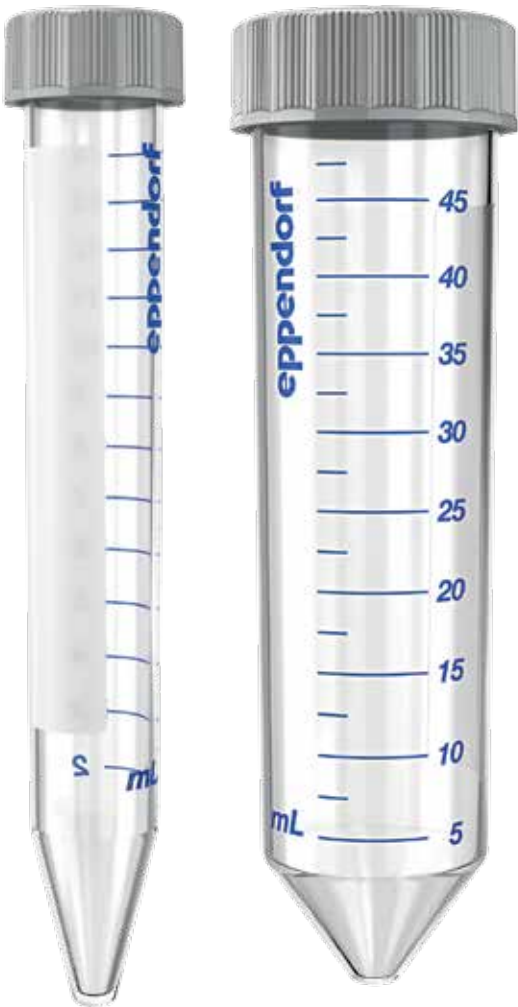
Ordering information

Description	Catalog No.	List USD
Eppendorf Tubes® 5.0 mL, clear		
Eppendorf Quality™, 200 tubes (2 bags x 100 tubes)	0030119401	\$ 54.10
PCR clean, 200 tubes (2 bags x 100 tubes)	0030119460	57.20
Eppendorf Biopur®, 50 tubes, individually wrapped	0030119479	60.20
Sterile, 200 tubes (10 bags x 20 tubes)	0030119487	59.20
DNA LoBind Tubes, 5.0 mL		
PCR clean, 200 tubes (4 bags x 50 tubes)	0030108310	64.30
Protein LoBind Tubes, 5.0 mL		
PCR clean, 100 tubes (2 bags x 50 tubes)	0030108302	54.00
Eppendorf Tubes® 5.0 mL, amber		
Eppendorf Quality™, amber (light protection), 200 tubes (2 bags x 100 tubes)	0030119452	66.40
Eppendorf Tubes® 5.0 mL starter pack , 5.0 mL, 400 tubes (2 packages with 2 bags of 100 each), 2 racks (with 16 locations each), white, 8 universal adapters for rotors with bore holes for 15 mL conical tubes, PCR clean	0030119380	174.60
Eppendorf Tubes® 5.0 mL with screw cap		
Eppendorf Quality™, 200 tubes (2 bags x 100 tubes)	0030122305	60.00
PCR clean, 200 tubes (2 bags x 100 tubes)	0030122313	68.00
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, 200 tubes (2 bags x 100 tubes)	0030122321	75.00
Tube Clip , for Eppendorf Tubes® 5.0 mL, Eppendorf Quality™, 10 pcs.	0030119509	26.30
Tube Rack , 16 x 5.0 mL tubes, 2 pcs., white, also suitable for 15 mL conical screw cap tubes	0030119495	54.00
Storage Box 5.0 mL , for 25 tubes 5.0 mL, 2 pcs., 5 x 5 grid, blue and red, made of polypropylene, for freezing to -86°C, with lid and alphanumeric code, height 65 mm	0030127943	24.30
Rotor FA-45-12-17 , incl. rotor lid, for 12 Eppendorf Tubes® 5.0 mL	5409700006	1,320.00
Rotor FA-45-16-17 , incl. rotor lid, for 16 Eppendorf Tubes® 5.0 mL	5427750002	1,120.00
Rotor FA-45-20-17 , incl. rotor lid, for 20 Eppendorf Tubes® 5.0 mL	5820765003	1,740.00
Adapter , for 14 Eppendorf Tubes® 5.0 mL, for Rotor S-4-104, set of 2 pcs.	5825739000	320.00
Adapter , for 1 Eppendorf Tubes® 5.0 mL 5.0 mL, for Rotor A-4-38, set of 2 pcs.	5702733008	162.00
Adapter , for Eppendorf Tubes® 5.0 mL, for Rotor F-35-6-30, large rotor bore, set of 2 pcs.	5427747001	151.00
Adapter , for 1 Eppendorf Tubes® 5.0 mL, for Rotor F-34-6-38, set of 2 pcs.	5804777000	162.00
Adapter , for Eppendorf Tubes® 5.0 mL, for Rotor F-35-6-30, small rotor bore, set of 2 pcs.	5427746005	151.00
Adapter , for 1 Eppendorf Tubes® 5.0 mL, for Rotor FA-45-6-30, set of 2 pcs.	5820730005	162.00
Universal adapter , for 1 Eppendorf Tubes® 5.0 mL, for centrifuges with rotors for conical 15 mL tubes, set of 8 pcs.	5820732008	29.20
Adapter , for 8 Eppendorf Tubes® 5.0 mL, for Rotor S-4-72, set of 2 pcs.	5804793005	282.00
Exchangeable thermoblock 8 x 5.0 mL , for use with Eppendorf ThermoMixer R	5309000333	751.00
Eppendorf SmartBlock™ 8 x 5.0 mL , for use with Eppendorf ThermoMixer C and ThermoStat C	5309000007	753.00
Reservoir Rack Module TC , for use in epMotion® Reservoir Racks, temperable 4 x Eppendorf Tubes® 5.0 mL	5075799340	455.00

i For more information go to www.eppendorf.com/5mL

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf Conical Tubes 15 mL and 50 mL



- 1. Manufactured without the use of slip agents,** plasticizers, and biocides—substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results
- 2. Cap with flattened and grooved sides**
 - > Supports user-friendly ergonomic handling
 - > Anti-roll cap with corrugation enables contamination-free resting when you need to set aside the cap
- 3. Centrifugation stability:** High centrifugation stability for fast and efficient protocols
- 4. Easy labeling:** Reliable and safe labeling due to a large writing area on the tube and due to a flat and light-colored cap
- 5. Precise dimensions:** Enable maximum compatibility with centrifuge rotors, mixers and shakers
- 6. Certified purity**
 - > Certified sterile and free from pyrogens, DNase, RNase, and DNA (human and bacterial) contamination risk
 - > Individual purity certificates are available for each lot www.eppendorf.com/certificates

Description
The Eppendorf Conical Tubes 15 mL and 50 mL extend the volume range of Eppendorf’s microcentrifuge tubes. Safe design and easy handling ensure the best sample processing. They represent the optimal solution for cell culture and cell biology applications as well as for sample preparation protocols in microbiology and molecular biology laboratories. Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 mL and 50 mL will perfectly fit into your workflow.

- Applications**
- > Convenient and safe cell culture applications
 - > Sample preparation in microbiology and molecular biology labs
 - > Storage of samples and solutions with larger volumes
 - > Preparation of mastermixes and buffers

i For more information go to www.eppendorf.com/consumables

Product appearance, specifications, and/or prices are subject to change without notice.



Whether centrifugation, mixing, or other applications – the Eppendorf Conical Tubes 15 and 50 mL will perfectly fit into your workflow.

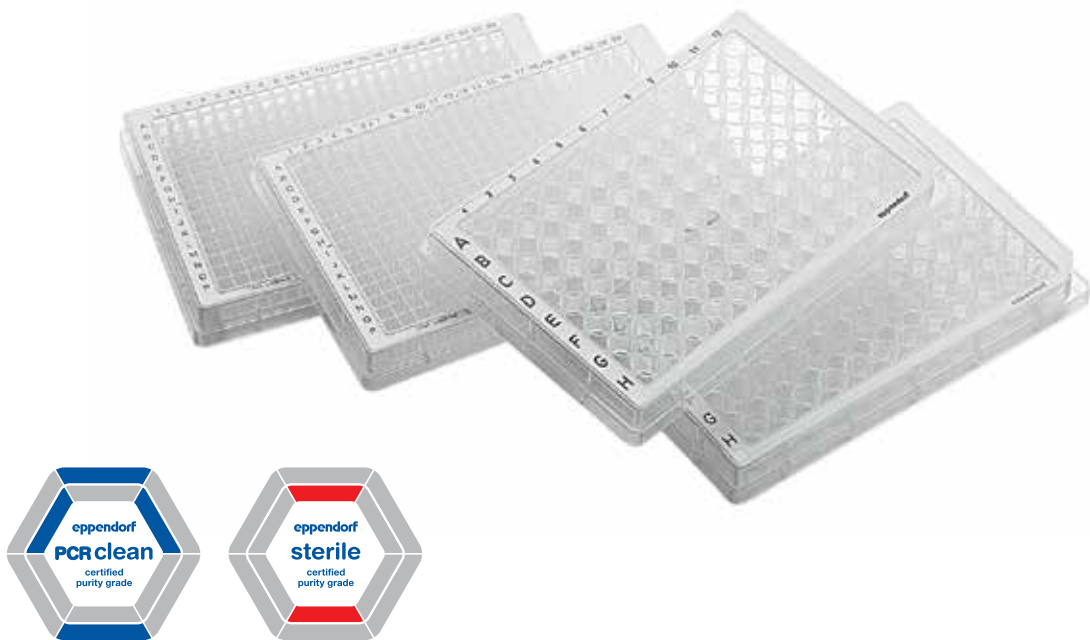
Eppendorf Tubes 5.0 mL with snap cap or screw cap: The ideal complement for smaller volumes (see page 164).

Technical specifications		
Model	Eppendorf Conical Tubes 15 mL	Eppendorf Conical Tubes 50 mL
Material	Tube: Polypropylene, Screw cap: High-density-Polyethylene (HDPE)	Tube: Polypropylene, Screw cap: High-density-Polyethylene (HDPE)
Dimensions	121 mm / 17 mm	116 mm / 30 mm
Operating temperature	-86 °C – 100 °C	-86 °C – 100 °C

Ordering information		
Description	Catalog No.	List USD
Eppendorf Conical Tubes, 15 mL		
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, 500 tubes (10 bags x 50 tubes)	0030122151	\$206.20
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, tubes inserted in polypropylene racks, 300 tubes (12 racks x 25 tubes)	0030122160	131.00
DNA LoBind Tubes, 15 mL		
PCR clean, conical tubes with screw cap, 250 tubes (5 bags x 50 tubes)	0030122208	78.00
Protein LoBind Tubes, 15 mL		
PCR clean, conical tubes with screw cap, 150 tubes (3 bags x 50 tubes)	0030122216	104.00
Eppendorf Conical Tubes, 15 mL, amber		
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, 250 tubes (5 bags x 50 tubes)	0030122194	72.80
Eppendorf Conical Tubes, 50 mL		
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, 500 tubes (20 bags x 25 tubes)	0030122178	257.30
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, tubes inserted in polypropylene racks, 300 tubes (12 racks x 25 tubes)	0030122186	160.00
DNA LoBind Tubes, 50 mL		
PCR clean, conical tubes with screw cap, 250 tubes (5 bags x 50 tubes)	0030122232	93.60
Protein LoBind Tubes, 50 mL		
PCR clean, conical tubes with screw cap, 150 tubes (3 bags x 50 tubes)	0030122240	120.90
Eppendorf Conical Tubes, 50 mL, amber		
Sterile, pyrogen-, DNase-, RNase-, and DNA-free, amber (light protection), 250 tubes (5 bags x 50 tubes)	0030122224	88.40

Eppendorf Microplates

STORAGE/REACTION
PLATES



Description

The Eppendorf Microplates bring a unique clarity to your laboratory! It has never been this easy to pipette, control and recover samples with a polypropylene microplate. The easy-to-read alphanumeric label of the OptiTrack® matrix on each plate makes it unbelievably easy to identify individual wells, speeds up the filling process and significantly reduces the risk of errors. The high transparency is "one-of-a-kind" and ensures that you can always quickly locate your samples. The Microplates are also available in Eppendorf LoBind material for maximum sample recovery (see pages 177-179).

Applications

- > Sample storage and preparation
- > Assays that require high resistance against temperature or solvents
- > Active ingredient screening
- > Combinatorial chemistry
- > Storage of cDNA or genomic banks
- > Protein analysis
- > Genotyping
- > Storage of siRNA or oligonucleotide libraries
- > Preparation of tissue and plant lysates

Product features

- > Unmatched, transparent polypropylene (PP) for improved sample visibility
- > OptiTrack® Matrix: up to 30 % faster sample identification and fewer pipetting errors via high-contrast alphanumeric labeling
- > RecoverMax® well design: Optimized well geometry for minimal remaining volume and excellent mixing properties
- > Raised well rims and smooth surface for reliable closing, even with heat sealing
- > g-Safe®: exceptional centrifugation stability up to 6,000 x g
- > Polypropylene guarantees high resistance to chemicals, mechanical stress and temperature extremes
- > Manufactured without the use of slip agents, plasticizers and biocides – Materials which could have a negative effect on bioassays
- > Guaranteed functionality from -86 °C to 100 °C
- > Autoclavable (121 °C, 20 min)
- > Available with barcode. Additional details available at: www.eppendorf.com/barcode

i For more information go to www.eppendorf.com/consumables

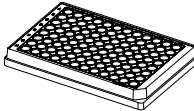
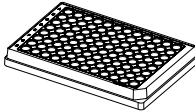
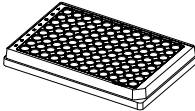
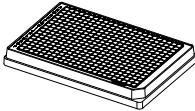
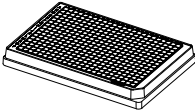
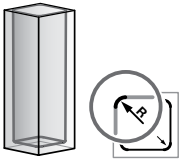
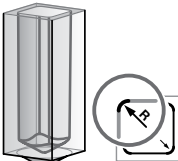
Product appearance, specifications, and/or prices are subject to change without notice.

STORAGE/REACTION
PLATES

Ordering information

Description	OptiTrack® frame color	Catalog No.	List USD
Microplate 96/F , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	951040005	\$200.10
sterile, 80 plates (5 bags x 16 plates)	☐ white	951040021	222.60
Microplate 96/U , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	951040048	200.10
sterile, 80 plates (5 bags x 16 plates)	☐ white	951040081	222.60
Microplate 96/V , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	951040188	200.10
sterile, 80 plates (5 bags x 16 plates)	☐ white	951040227	222.60
Microplate 384/F , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	951040341	391.00
sterile, 80 plates (5 bags x 16 plates)	☐ white	951040383	412.50
Microplate 384/V , wells clear			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	951040421	391.00
sterile, 80 plates (5 bags x 16 plates)	☐ white	951040464	412.50

Technical specifications

					
Description	Microplate 96/F	Microplate 96/U	Microplate 96/V	Microplate 384/F	Microplate 384/V-PP
Number of wells	96 wells	96 wells	96 wells	384 wells	384 wells
Work volume	50-350 µL	20-320 µL	20-300 µL	10-120 µL	5-120 µL
Total volume	400 µL	360 µL	350 µL	150 µL	140 µL
					
Bottom shape	flat	round	conical	flat	conical

Eppendorf Assay/Reader Microplates



Description

Eppendorf assay plates are optimized for measuring absorbance assays in the visible and UV range, fluorescence and chemiluminescence assays. Solid plates are suitable for top-reading plate readers. Clear plates and black/clear plates can be used with top- and bottom-reading plate readers.

The black Eppendorf Microplates are ideal for fluorescence detection. An excellent signal-to-noise ratio provides low detection limits in assays - for clear signals even with low-concentration samples! The white Eppendorf Microplates maximize reflection for high sensitivity during detection of luminescence or weak fluorescence signals.

Applications

- > Clear VIS and UV-VIS plates for all absorbance assays in the visible and UV range
- > Black and white Microplates for Fluorescence and Luminescence detection.
- > DNA- and Protein concentration with absorbance or fluorescent dyes
- > Cell based assays
- > Cell viability and apoptosis assays
- > Cell imaging
- > Protocols that require high resistance against temperature or solvents
- > Dilution series
- > Preparation of tissue and plant lysates

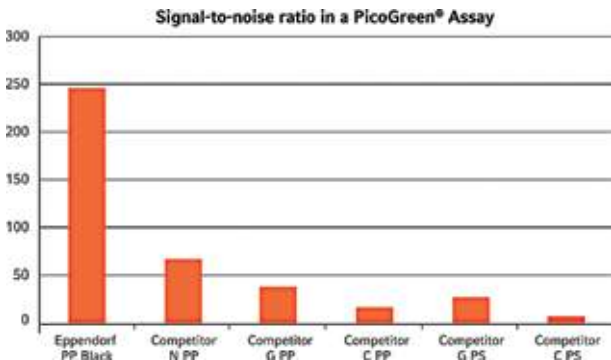


Product features

- > UV-VIS microplates feature an ultrathin film bottom for excellent light transmission in the UV range
- > Black Microplates offer an excellent signal-to-noise ratio - for clear signals even with low-concentration samples
- > White Eppendorf Microplates are optimized for highest sensitivity in the detection of luminescence signals by maximizing reflection
- > Solid black and white assay plates are made of polypropylene resulting in high resistance to chemicals, mechanical stress and temperature extremes
- > All plates are optimized for minimal autofluorescence and autoluminescence
- > PCR clean or Sterile: Every lot is individually tested and certified for guaranteed purity and highest reliability

i For more information go to www.eppendorf.com/consumables

Product appearance, specifications, and/or prices are subject to change without notice.



Fluorescence assay with black Eppendorf Assay Microplate. Comparison of the signal-to-noise ratio in a DNA quantification using a DNA-binding fluorescent dye. Black Eppendorf Assay Microplates and black microplates of other manufacturers were used. PP = polypropylene, PS = polystyrene. For more information see Application Note 203.

Ordering information

Description	OptiTrack® frame color	Catalog No.	List USD
Microplate 96/F , wells white			
PCR clean, 80 plates (5 bags x 16 plates)	■ gray	951040137	\$263.40
Microplate 96/U , wells white			
PCR clean, 80 plates (5 bags x 16 plates)	■ gray	951040145	263.40
Microplate 96/V , wells white			
PCR clean, 80 plates (5 bags x 16 plates)	■ gray	951040308	263.40
Microplate 384/V , wells white			
PCR clean, 80 plates (5 bags x 16 plates)	■ gray	951040503	455.40
Microplate 96/F , wells black			
PCR clean, 80 plates (5 bags x 16 plates)	□ white	951040196	263.40
Microplate 96/U , wells black			
PCR clean, 80 plates (5 bags x 16 plates)	□ white	951040102	263.40
Microplate 96/V , wells black			
PCR clean, 80 plates (5 bags x 16 plates)	□ white	951040260	263.40
Microplate 384/V , wells black			
PCR clean, 80 plates (5 bags x 16 plates)	□ white	951040481	455.40
Microplate UV-VIS 96/F , wells clear			
PCR clean, 40 plates (4 bags x 10 plates)	colorless	0030741048	507.40
Microplate VIS 96/F , wells clear			
PCR clean, 40 plates (4 bags x 10 plates)	colorless	0030730020	169.50

Eppendorf Deepwell Plates



Description
Eppendorf Deepwell Plates 96 and 384 are high-performance plates for all manual and automated applications – from sample storage at -86 °C to DNA denaturation at 100 °C. Manufactured from pure polypropylene (PP), these plates offer innovative features: More dependability. More efficiency. More stability. The plates are available with a white, yellow, green or blue border. For easy identification of wells, a high-contrast alphanumeric label is laser-engraved in the border. This allows you to find your sample up to 30 % more quickly while reducing pipetting errors. With all of these sophisticated features, these plates set new standards in your laboratory.

- Applications**
- > Sample storage and preparation
 - > Bacteria and yeast cultivation
 - > DNA and RNA isolation with high throughput
 - > Storage of cDNA or genomic banks
 - > Storage of siRNA or oligonucleotide libraries
 - > Protein analysis
 - > Storage of valuable protein and DNA samples in Eppendorf LoBind plates
 - > Plasmid purification with high throughput
 - > Creating dilutions series



- Product features**
- > OptiTrack® matrix: up to 30 % faster sample identification and fewer pipetting errors via high-contrast alphanumeric labeling
 - > Conical RecoverMax® well design: Optimized well geometry for maximum sample recovery and excellent mixing properties
 - > Minimal remaining volume and high uniformity from well to well
 - > Raised well rims and smooth surface for reliable sealing, even with heat sealing
 - > Easy and reliable stacking
 - > g-Safe®: exceptional centrifugation stability up to 6,000 x g for faster protocols and improved sample quality
 - > High-quality polypropylene guarantees high resistance to chemicals, mechanical stress and temperature extremes
 - > Manufactured without demoulding aids, softeners or biocides – Materials which could have a negative effect on bioassays
 - > Autoclavable (121 °C, 20 min)
 - > Available with barcode. Additional details available at: www.eppendorf.com/barcode

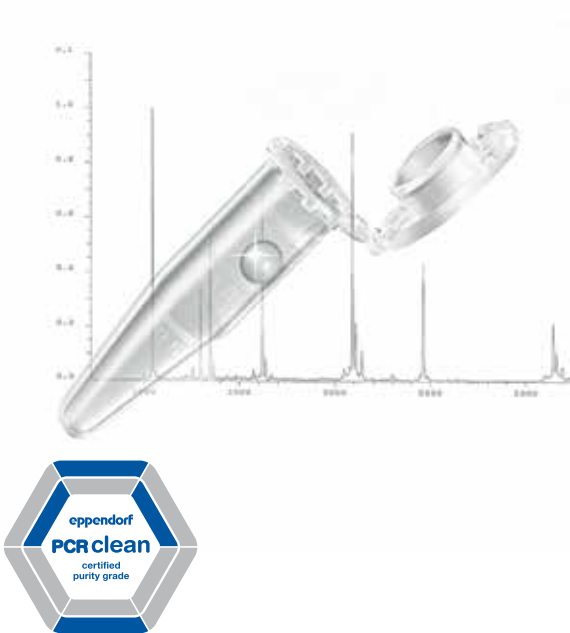
i For more information go to www.eppendorf.com/Deepwellplates

Product appearance, specifications, and/or prices are subject to change without notice.

Ordering information				
Description			Catalog No.	List USD
Deepwell Plate 96/2,000 µL, wells clear, 2,000 µL				
PCR clean, 20 plates (5 bags x 4 plates)		white	951033405	\$141.90
PCR clean, 20 plates (5 bags x 4 plates)		yellow	951033421	141.90
PCR clean, 20 plates (5 bags x 4 plates)		green	951033464	141.90
PCR clean, 20 plates (5 bags x 4 plates)		blue	951033481	141.90
PCR clean, 80 plates (10 bags x 8 plates)		white	951033600	486.00
sterile, 20 plates (5 bags x 4 plates)		white	951033502	159.30
sterile, 20 plates (5 bags x 4 plates)		yellow	951033529	159.30
sterile, 20 plates (5 bags x 4 plates)		green	951033561	159.30
sterile, 20 plates (5 bags x 4 plates)		blue	951033588	159.30
sterile, 80 plates (10 bags x 8 plates)		white	951033707	549.30
Deepwell Plate 96/1,000 µL, wells clear, 1,000 µL				
PCR clean, 20 plates (5 bags x 4 plates)		white	951032603	116.40
PCR clean, 20 plates (5 bags x 4 plates)		yellow	951032620	116.40
PCR clean, 20 plates (5 bags x 4 plates)		green	951032662	116.40
PCR clean, 20 plates (5 bags x 4 plates)		blue	951032689	116.40
PCR clean, 80 plates (10 bags x 8 plates)		white	951033006	397.20
sterile, 20 plates (5 bags x 4 plates)		white	951032701	131.70
sterile, 20 plates (5 bags x 4 plates)		yellow	951032727	131.70
sterile, 20 plates (5 bags x 4 plates)		green	951032760	131.70
sterile, 20 plates (5 bags x 4 plates)		blue	951032786	131.70
sterile, 80 plates (10 bags x 8 plates)		white	951033103	443.10
Deepwell Plate 96/500 µL, wells clear, 500 µL				
PCR clean, 40 plates (5 bags x 8 plates)		white	951031801	293.00
PCR clean, 40 plates (5 bags x 8 plates)		yellow	951031828	293.00
PCR clean, 40 plates (5 bags x 8 plates)		green	951031861	293.00
PCR clean, 40 plates (5 bags x 8 plates)		blue	951031887	293.00
PCR clean, 120 plates (10 bags x 12 plates)		white	951032204	792.30
sterile, 40 plates (5 bags x 8 plates)		white	951031909	327.70
sterile, 40 plates (5 bags x 8 plates)		yellow	951031925	327.70
sterile, 40 plates (5 bags x 8 plates)		green	951031968	327.70
sterile, 40 plates (5 bags x 8 plates)		blue	951031984	327.70
sterile, 120 plates (10 bags x 12 plates)		white	951032301	866.80
Deepwell Plate 384/200 µL, wells clear, 200 µL				
PCR clean, 40 plates (5 bags x 8 plates)		white	951031003	327.70
PCR clean, 120 plates (10 bags x 12 plates)		white	951031402	855.60
sterile, 40 plates (5 bags x 8 plates)		white	951031101	359.40
sterile, 120 plates (10 bags x 12 plates)		white	951031500	961.80

Protein LoBind Tubes

PROTEIN LOBIND
TUBES



- Product features**
- > LoBind material guarantees maximum sample recovery for improved assay results
 - > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
 - > Lot-tested and certified free of human DNA, DNase, RNase and PCR inhibitors (PCR clean)
 - > Available in tube, microplate, and deepwell plate formats for easy-up scaling
 - > Precise lid sealing for minimum evaporation rates

Description
When biological samples are stored or incubated in standard vessels, over 90 % of the sample volume can be lost within 24 hours as a result of binding to the plastic surface. Eppendorf LoBind Tubes maximize sample recovery by significantly reducing sample binding to the surface. A special, two-component polymer mix creates a hydrophilic surface that guarantees optimal recovery rates of valuable samples. Protein LoBind Tubes have been specially designed for use in protein research or with sensitive proteomic test methods, and frequently provide significantly improved analysis results.

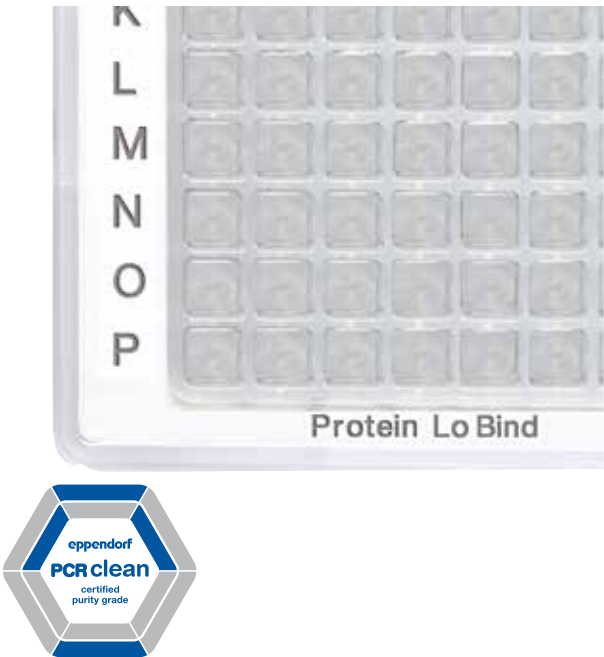
- Applications**
- > Preparation or storage of protein, peptide or antibody samples
 - > Enzymatic assays - the hydrophilic surface reduces denaturation when it comes into contact with the tube inner wall
 - > Prevention of sample loss during storage of virus stock solutions
 - > Storage of cell suspensions

Ordering information		
Description	Catalog No.	List USD
0.5 mL Tubes, Protein LoBind		
PCR clean, 100 tubes (2 bags x 50 tubes)	022431064	\$ 24.40
1.5 mL Tubes, Protein LoBind		
PCR clean, 100 tubes (2 bags x 50 tubes)	022431081	24.40
2.0 mL Tubes, Protein LoBind		
PCR clean, 100 tubes (2 bags x 50 tubes)	022431102	24.40
5.0 mL Tubes, Protein LoBind		
PCR clean, 100 tubes (2 bags x 50 tubes)	0030108302	54.00
15 mL Tubes, Protein LoBind		
PCR clean, conical tubes with screw cap, 150 tubes (3 bags x 50 tubes)	0030122216	104.00
50 mL Tubes, Protein LoBind		
PCR clean, conical tubes with screw cap, 150 tubes (3 bags x 50 tubes)	0030122240	120.90

Product appearance, specifications, and/or prices are subject to change without notice.

Protein LoBind Plates

PROTEIN LOBIND
PLATES



- Product features**
- > LoBind material guarantees maximum sample recovery for improved assay results
 - > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
 - > Lot-tested and certified free of human DNA, DNase, RNase and PCR inhibitors (PCR clean)
 - > Available in tube, microplate, and deepwell plate formats for easy-up scaling
 - > Unique OptiTrack® matrix: up to 30 % faster sample identification and fewer pipetting errors
 - > RecoverMax® well design: Optimized well geometry for minimal remaining/dead volume and excellent mixing properties
 - > Raised well rims and a smooth surface guarantee reliable sealing in plates
 - > Available with barcode. Additional details available at: www.eppendorf.com/barcode

Description
When biological samples are stored or incubated in standard vessels, over 90 % of the sample volume can be lost within 24 hours as a result of binding to the plastic surface. Eppendorf LoBind plates maximize sample recovery by significantly reducing sample binding to the surface. A special, two-component polymer mix creates a hydrophilic surface that guarantees optimal recovery rates of valuable samples. Protein LoBind Plates have been specially designed for use in protein research or with sensitive proteomic test methods, and frequently provide significantly improved analysis results.

- Applications**
- > Preparation or storage of protein, peptide or antibody samples
 - > Enzymatic assays - the hydrophilic surface reduces denaturation when it comes into contact with the tube inner wall
 - > Prevention of sample loss during storage of virus stock solutions
 - > Storage of cell suspensions

Ordering information			
Description	OptiTrack® frame color	Catalog No.	List USD
Deepwell Plate 96/2000 µL, Protein LoBind, 2,000 µL			
PCR clean, 20 plates (5 bags x 4 plates)	☐ white	0030504305	\$ 271.60
Deepwell Plate 96/1000 µL, Protein LoBind, 1,000 µL			
PCR clean, 20 plates (5 bags x 4 plates)	☐ white	951032905	227.70
PCR clean, 80 plates (10 bags x 8 plates)	☐ white	951033308	792.30
Deepwell Plate 96/500 µL, Protein LoBind, 500 µL			
PCR clean, 40 plates (5 bags x 8 plates)	☐ white	951032107	586.10
PCR clean, 120 plates (10 bags x 12 plates)	☐ white	951032506	1,582.50
Deepwell Plate 384/200 µL, Protein LoBind, 200 µL			
PCR clean, 40 plates (5 bags x 8 plates)	☐ white	951031305	645.30
PCR clean, 120 plates (10 bags x 12 plates)	☐ white	951031704	1,715.30
Microplate 384/V-PP, Protein LoBind			
PCR clean, 80 plates (5 x 16 plates)	☐ white	951040589	718.80
PCR clean, 240 plates (10 x 24 plates)	☐ white	951040601	1,939.90

i For more information go to www.eppendorf.com/consumables

DNA LoBind Tubes



- Product features**
- > LoBind material guarantees maximum sample recovery for improved assay results
 - > Free of surface coating (e.g., silicone) to minimize the risk of sample interference
 - > Lot-tested and certified free of human DNA, DNase, RNase and PCR inhibitors (PCR clean)
 - > Available in tube, microplate, and deepwell plate formats for easy-up scaling
 - > Precise lid sealing for minimal evaporation rates in tube format
 - > Rated up to 30,000 x g (25,000 x g for 2.0 mL tube) centrifugation speed for molecular biology applications

Description
DNA LoBind tubes improve recovery of nucleic acids by reducing their absorption to the tube wall. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100 % recovery of DNA/ RNA molecules-without surface coating to eliminate the risk of sample contamination. DNA LoBind tubes are batch-tested and certified by an independent laboratory to be free from DNA, DNase, RNase, and PCR inhibitors. Eppendorf DNA LoBind tubes are ideal for sample preparation of long-term storage of nucleic acids in forensic, microarrays, NGS applications, and many others.

- Applications**
- > Preparation or storage of DNA and RNA samples
 - > Forensic trace analysis
 - > Preparing dilution series in quantitative qPCR
 - > Sample preparation in next-generation sequencing
 - > Creation of genomic or oligonucleotide libraries

Ordering information		
Description	Catalog No.	List USD
0.5 mL Tubes, DNA LoBind		
PCR clean, 250 tubes (5 bags x 50 tubes)	022431005	\$36.40
1.5 mL Tubes, DNA LoBind		
PCR clean, 250 tubes (5 bags x 50 tubes)	022431021	36.40
2.0 mL Tubes, DNA LoBind		
PCR clean, 250 tubes (5 bags x 50 tubes)	022431048	36.40
5.0 mL Tubes, DNA LoBind		
PCR clean, 200 tubes (4 bags x 50 tubes)	0030108310	64.30
15 mL Tubes, DNA LoBind		
PCR clean, conical tubes with screw cap, 250 tubes (5 bags x 50 tubes)	0030122208	78.00
50 mL Tubes, DNA LoBind		
PCR clean, conical tubes with screw cap, 250 tubes (5 bags x 50 tubes)	0030122232	93.60

DNA LoBind Plates



- Product features**
- > LoBind material guarantees maximum sample recovery for improved assay results
 - > Free of surface coating (e.g. silicone) to minimize the risk of sample interference
 - > Lot-tested and certified free of human DNA, DNase, RNase and PCR inhibitors (PCR clean)
 - > Available in tube, microplate, and deepwell plate formats for easy-up scaling
 - > Unique OptiTrack® matrix: up to 30 % faster sample identification and fewer pipetting errors
 - > RecoverMax® well design: Optimized well geometry for minimal remaining/dead volume and excellent mixing properties
 - > Raised well rims and a smooth surface guarantee reliable sealing
 - > Available with barcode. Additional details available at: www.eppendorf.com/barcode

Description
DNA LoBind plates improve recovery of nucleic acids by reducing their absorption to the well. A combination of special manufacturing technologies and selected polypropylene batches ensures nearly 100 % recovery of DNA/RNA molecules-without surface coating to eliminate the risk of sample contamination. DNA LoBind plates are batch-tested and certified by an independent laboratory to be free from DNA, DNase, RNase, and PCR inhibitors. Eppendorf DNA LoBind plates are ideal for sample preparation of long-term storage of nucleic acids in forensic, microarrays, NGS applications, and many others.

- Applications**
- > Preparation or storage of DNA and RNA samples
 - > Forensic trace analysis
 - > Preparing dilution series in quantitative qPCR
 - > Sample preparation in next-generation sequencing
 - > Creation of genomic or oligonucleotide libraries

Ordering information			
Description	OptiTrack® frame color	Catalog No.	List USD
Deepwell Plate 96/1000 µL, DNA LoBind, 1,000 µL, Eppendorf LoBind®			
PCR clean, 20 plates (5 bags x 4 plates)	☐ white	951032808	\$ 141.90
PCR clean, 80 plates (10 bags x 8 plates)	☐ white	951033201	486.00
Deepwell Plate 96/500 µL, DNA LoBind, 500 µL, Eppendorf LoBind®			
PCR clean, 40 plates (5 bags x 8 plates)	☐ white	951032000	353.30
PCR clean, 120 plates (10 bags x 12 plates)	☐ white	951032409	950.50
Deepwell Plate 384/200 µL, DNA LoBind, 200 µL, Eppendorf LoBind®			
PCR clean, 40 plates (5 bags x 8 plates)	☐ white	951031208	391.00
PCR clean, 120 plates (10 bags x 12 plates)	☐ white	951031607	1,061.80
Microplate 96/V-PP, DNA LoBind, Eppendorf LoBind®			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	0030603303	369.60
Microplate 384/V-PP, DNA LoBind, Eppendorf LoBind®			
PCR clean, 80 plates (5 bags x 16 plates)	☐ white	951040546	455.40
PCR clean, 240 plates (10 bags x 24 plates)	☐ white	951040562	1,225.20

Plate Sealing Options



Product features

- > Storage film and foil self-adhesive seals for simple and dependable sealing during sample storage
- > Heat sealing film and foil for continuous locking with the best evaporation protection
- > Eppendorf Plates are designed to be heat-sealed up to 5 times
- > Foil products are made of aluminum, can be pierced, and protect light-sensitive samples
- > Film products are transparent and provide protection against unwanted punctures
- > Eppendorf plate lid provides stable, flexible protection of samples during short term storage
- > Eppendorf Sealing Mats are autoclavable and reusable

Heat sealing vs. adhesive seals vs. mats:

- > Heat sealing melts the seals onto the plastic of the plate providing a permanent seal and thus better evaporation protection than adhesive seals. Heat sealing is usually used for long-term storage, storage of small sample volumes or when plates have to be shipped.
- > Mats and adhesive seals can be manually applied without the need for additional equipment. Since they don't require heating there is less risk for sample damage. In contrast to the mats that protrude into the wells, adhesive seals don't reduce the well volume and are suitable for optical assays.
- > Mats are considered reusable since they can be cleaned and autoclaved for sterile applications

Aluminum foil vs. transparent films:

- > Aluminum foil provides slightly better evaporation protection than plastic films - especially during long-term storage. It is also easily piercable with single or multichannel pipettors and robotic tips for sample recovery. Aluminum provides light protection for light sensitive samples
- > Transparent films allow you to see the sample based on the type of film. The adhesive in our self-adhesive film will not interfere with fluorescence, luminescence, or colorimetric assays. Since films are non-piercable they provide better protection from accidental piercing.

Ordering information

Description	Catalog No.	List USD
Adhesive seals		
Eppendorf Storage Film , self-adhesive, PCR clean, 100 pcs. (2 bags x 50 pcs.)	0030127870	\$138.80
Eppendorf Storage Foil , self-adhesive, PCR clean, 100 pcs.	0030127889	138.80
Sealing Mats		
Eppendorf Sealing Mat , for DWP 96/2000 , PCR clean, 50 pcs. (5 bags x 10 pcs.)	0030127960	225.60
Eppendorf Sealing Mat , for DWP 96/1000 and DWP 96/500, PCR clean, 50 pcs. (5 bags x 10 pcs.)	0030127978	225.60
Plate Lids		
Eppendorf Plates® Lid , for MTP and DWP, PCR clean, 80 pcs. (5 bags x 16 pcs.)	0030131517	128.30
Eppendorf Plates® Lid , for MTP and DWP, sterile, 80 pcs. (5 bags x 16 pcs.)	0030131525	150.10
Heat Sealing		
Eppendorf Heat Sealing Film , PCR clean, 100 pcs.	0030127838	210.30
Eppendorf Heat Sealing Foil , PCR clean, 100 pcs.	0030127854	137.80

Tube Rack



Tube Rack

- > Ergonomic design
- > Numbered slots
- > Optimized capacity (24 places for 0.5 mL-2.0 mL vessels, 16 places for 5.0 mL vessels)
- > UV-resistant
- > Autoclavable (121 °C, 20 min)
- > Variable: rack for Eppendorf 5.0 mL vessels, can also be used for 15 mL conical screw cap tubes
- > Robust coupling mechanism for 0.5 mL-2.0 mL racks
- > Stackable

Ordering information

Description	Catalog No.	List USD
Tube Rack , 24 locations, for 0.5 mL vessels	022364243	\$28.60
Tube Rack , 24 locations, for 1.5/2.0 mL vessels	022364227	28.60
Tube Rack , 16 wells, for 5.0 mL tubes, 2 pcs., white, also suitable for 15 mL conical screw cap tubes	0030119495	54.00



Micropestle

- > Two sides for optimal fit in 1.5 mL and 2.0 mL vessels
- > Autoclavable (121°C, 20 min)

Ordering information

Description	Catalog No.	List USD
Micropestle , for resuspending pellets in 1.5/2.0 mL vessels, 10 pcs.	022365622	\$90.40

i For more information go to www.eppendorf.com/temperaturecontrol-mixing

NEW - Eppendorf Storage Boxes

Description

The Eppendorf Storage Boxes - a complete system solution for sample storage.

The comprehensive modular concept allows you to select the optimal box combinations for individual storage demands. The outer footprint dimensions are compatible with common freezer rack systems and the different inner grid variants provide for a perfect fit to all typical tube formats: cryogenic tubes, microcentrifuge tubes, conical tubes 15 and 50 mL and other laboratory vessels.

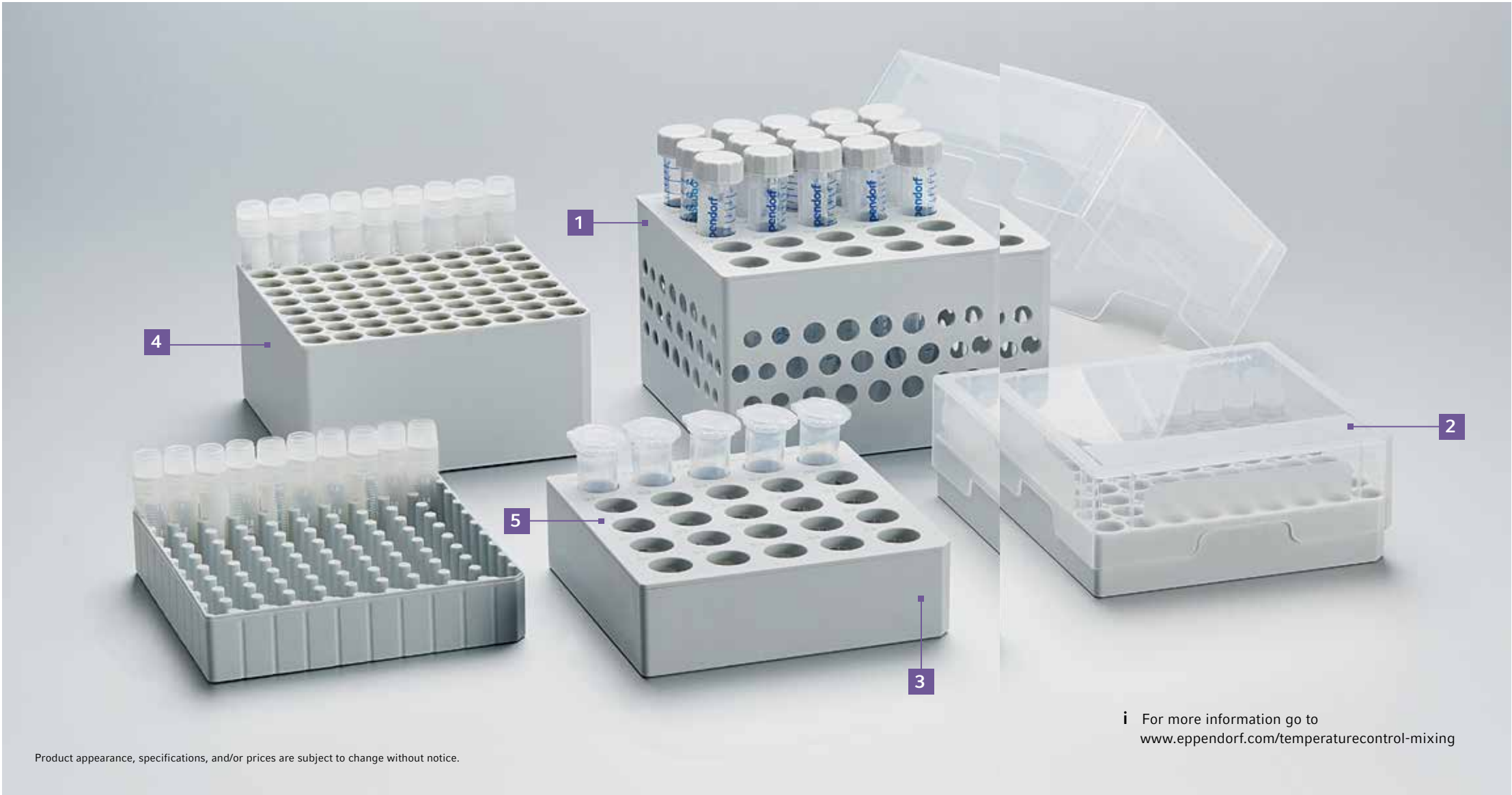
This space-saving approach together with the application benefits resulting from the listed product features help to optimize your storage and archiving of samples.

Product features

- > Made of polypropylene (PP) for high stability in freezing applications and a smooth opening and closing
- > For freezing to -86 °C
- > High-contrast permanent alphanumeric marking of each location through laser labeling enables easy sample reference and minimizes risk of sample mix-up
- > Autoclavable (121 °C, 20 min)
- > Transparent lid for easy and fast sample inspection
- > Flexible and reliable labeling on the light colored box and on the 5 writing areas of the lid
- > Optimal use of freezer space due to flexibility of various formats

Ordering information

Description	Catalog No.	List USD
Storage Box 10 x 10 , for 100 cryogenic tubes w. int. thread, 3 pcs., height 52.8 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140508	\$31.50
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 1-2 mL, 3 pcs., height 52.8 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140516	32.10
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 3 mL, 2 pcs., height 76.2 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140540	22.00
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 4-5 mL, 2 pcs., height 101.6 mm, 4 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140567	22.80
Storage Box 8 x 8 , for 64 tubes 1-2 mL, 3 pcs., height 52.8 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140524	32.10
Storage Box 5 x 5 , for 25 tubes 5 mL, 4 pcs., height 63.5 mm, 2.5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140532	45.60
Storage Box 5 x 5 , for 25 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140583	23.40
Storage Box 3 x 3 , for 9 tubes 50 mL and 4 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140591	23.40



- 1. Optimal compatibility of grid and box enables both a firm fit during usage and the possibility to remove for cleaning
- 2. Transparent lid for easy and fast sample inspection combined with 5 writing areas for a flexible labeling
- 3. High quality polypropylene ensures an excellent dimensional stability
- 4. Flexible and high-contrast labeling on the light colored box
- 5. Reliable sample reference through permanent laser-labeled alphanumeric marking of each location

i For more information go to www.eppendorf.com/temperaturecontrol-mixing

Product appearance, specifications, and/or prices are subject to change without notice.



Model	MiniSpin®/ MiniSpin® plus	5418/5418 R	5424/5424 R	5427 R
Positioning	Entry-level	Medium capacity for molecular biology	The laboratory standard	High throughput
Page	186	188	190	194
Max. capacity	12 x 1.5/2.0 mL	18 x 1.5/2.0 mL	24 x 1.5/2.0 mL	48 x 1.5/2.0 mL
Max. RCF	12,100 x g/ 14,100 x g	16,873 x g	21,130 x g	25,000 x g
Max. speed	13,400 rpm/ 14,500 rpm	14,000 rpm	15,000 rpm	16,220 rpm
Rotors available	2	1	4	9
Temperature control range		0 °C to +40 °C	-10 °C to +40 °C	-11 °C to 40 °C
Dimensions (W x D x H)	8.9 x 9.4 x 5.1 in / 22.6 x 23.9 x 13.0 cm 8.9 x 9.4 x 4.7 in / 22.6 x 23.9 x 12.0 cm	8.2 x 11.8 x 8.3 in / 21 x 30 x 21 cm 11.7 x 18.2 x 9.8 in / 30 x 46 x 25 cm	9.3 x 12.6 x 8.9 in / 24 x 32 x 23 cm 11.4 x 18.9 x 10 in / 29 x 48 x 26 cm	12.6 x 21.3 x 10 in / 31.9 x 54.0 x 25.4 cm
Height (with open lid)	9.8 in / 25 cm	16.7 in / 43 cm 20 in / 52 cm	17 in / 44 cm 20 in / 51 cm	21.9 in / 55.7 cm
Weight w/o accessories	9.5 lb / 4.3 kg	17 lb / 7.7 kg 48.5 lb / 22 kg	29.5 lb / 13.4 kg 46.3 lb / 21 kg	66.1 lb / 30 kg
Max. power consumption	70 W/85 W	170 W/320 W	250 W/350 W	550 W
Tubes/plates capacity ^{*1}				
1.5/2.0 mL Eppendorf tubes	12	18	24	48
Eppendorf Tubes® 5.0 mL	–	–	–	12
8-place PCR strips	2	–	4	6
15 mL conical	–	–	–	–
50 mL conical	–	–	–	–
2.6 – 7 mL (13 mm)	–	–	–	–
3 – 15 mL (16 mm)	–	–	–	–
7 – 17 mL (17.5 mm)	–	–	–	–
180 – 250 mL bottle	–	–	–	–
500 mL Corning®	–	–	–	–
750 mL bottle	–	–	–	–
1,000 mL bottle	–	–	–	–
MTP/PCR-plates	–	–	–	–
Deepwell plates (DWP)	–	–	–	–

^{*1}F = Fixed-angle rotor, S = Swing-bucket rotor

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.



5430/5430 R	5702/5702 R/5702 RH	5804/5804 R	5810/5810 R	5920 R
Microcentrifuge with multipurpose capabilities	Low speed centrifuge optimized for medium capacity needs in clinical research and cell culture labs.	Compact high speed centrifuge for medium capacity needs. With swing-bucket rotor and deepwell plate capacity	The workhorse for medium to high-throughput laboratories: Highly versatile, high speed and high capacity	Bench-top centrifuge with floor-standing capabilities
200	206	214	214	240
48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP	4 x 100 mL	4 x 250 mL/ 2 x 5 MTP	4 x 750 mL/ 4 x 4 MTP	4 x 1000 mL/ 4 x 7 MTP
30,130 x g	3,000 x g	20,913 x g	20,913 x g	25,062 x g
17,500 rpm	4,400 rpm	14,000 rpm	14,000 rpm	14,000 rpm
12	6	12	18	8
-11 °C to 40 °C	– /-9 °C to 40 °C/-9 °C to 42 °C	-9 °C to 40 °C	– /-9 °C to 40 °C	-11 °C to 40 °C
13 x 16.3 x 9.8 in / 33 x 42 x 25 cm 15 x 25.2 x 11.7 in / 38 x 64 x 29 cm	12.5 x 15.6 x 9.5 in / 32 x 40 x 24 cm 15 x 22.8 x 10.2 in / 38 x 58 x 26 cm 15 x 22.8 x 10.2 in / 38 x 58 x 26 cm	18 x 20 x 13 in / 47 x 55 x 34 cm 25 x 20 x 13 in / 64 x 55 x 34 cm	21 x 21 x 13 in / 54 x 61 x 35 cm 28 x 21 x 13 in / 70 x 61 x 35 cm	29 x 28 x 15 in / 74 x 71 x 40 cm
21.8 in / 56 cm 24.8 in / 63 cm	20.7 in / 53 cm 23.4 in / 60 cm 23.4 in / 60 cm	29 in / 74 cm 29 in / 74 cm	31 in / 80 cm 31 in / 80 cm	37 in / 94 cm
63.8 lb / 29 kg 123.5 lb / 56 kg	44 lb / 20 kg 78 lb / 36 kg 78 lb / 36 kg	121 lb / 55 kg 176 lb / 80 kg	150 lb / 68 kg 218 lb / 99 kg	306 lb / 139 kg
475 W/1,050 W	200 W/380 W/380 W	900 W/1,650 W	900 W/1,650 W	1,440 W
48	24 (F)/16 (S)	104	200	200
16	4	20 (F)/32 (S)	20 (F)/56 (S)	20 (F)/108 (S)
8	–	6	6	–
6	20 (F)/8 (S)	40 (F)/32 (S)	40 (F)/56 (S)	6 (F)/108 (S)
6	4 (S)	6 (F)/16 (S)	6 (F)/28 (S)	6 (F)/52 (S)
12	36	6 (F)/56 (S)	6 (F)/100 (S)	6 (F)/196 (S)
12	30	6 (F)/52 (S)	6 (F)/80 (S)	6 (F)/144 (S)
12	24	6 (F)/48 (S)	6 (F)/80 (S)	6 (F)/80 (S)
–	–	4	4	8
–	–	–	4	4
–	–	–	4	4
–	–	–	–	4
2	–	10	16	28
2	–	4	4	8

MiniSpin®/ MiniSpin® plus



Description

Powerful and user-friendly MiniSpin and MiniSpin plus are small enough so that each workstation can be equipped with a “personal” centrifuge. Two models are available to meet your performance requirements. MiniSpin plus provides speed sufficient for molecular biology separations.

Product features

- > Rotor capacity: 12 x 1.5/2.0 mL vessels, 2 x PCR strip
- > Max. speed: 14,100 x g (14,500 rpm)
- > Extremely compact footprint
- > Acceleration and deceleration time < 13 s
- > User-friendly digital display for time and speed
- > Metal rotor bowl
- > Separate short-spin key for fast and comfortable centrifugation
- > Optional ventilation flow reduces heating and protects temperature-sensitive samples
- > Soft-touch lid closure for ergonomic lid locking
- > Automatic lid opening at the end of the run to prevent sample warming and to allow easy access to samples

Special features for MiniSpin plus

- > Automatic rpm/rcf conversion
- > Extended time to 99 min or continuous centrifugation

i For more information go to www.eppendorf.com/centrifugation



PCR-strip rotor (F-55-16-5-PCR)

Technical specifications		
Model	MiniSpin®	MiniSpin® plus
Max. RCF	12,100 x g	14,100 x g
Speed	800 – 13,400 rpm (100 rpm steps)	800 – 14,500 rpm (100 rpm steps)
Max. capacity	12 x 1.5/2.0 mL	12 x 1.5/2.0 mL
Rotors available	2	2
Acceleration time	13 s	13 s
Deceleration time	12 s	12 s
Timer	15 s – 30 min	15 s to 99 min, with continuous run function
Noise level	< 49 dB(A)	< 52 dB(A)
Max. power consumption	70 W	85 W
Dimensions (W x D x H)	8.9 x 9.4 x 4.7 in / 22.6 x 23.9 x 13.0 cm	8.9 x 9.4 x 4.7 in / 22.6 x 23.9 x 12.0 cm
Height (with open lid)	9.8 in / 25 cm	9.8 in / 25 cm
Weight w/o accessories	9.5 lb / 4.3 kg	9.5 lb / 4.3 kg

Ordering information

Description	Catalog No.	List USD
Centrifuge MiniSpin®, with Rotor F-45-12-11, 120 V/50 – 60 Hz	022620100	\$1,450.00
Centrifuge MiniSpin® plus, with Rotor F-45-12-11, 120 V/50 – 60 Hz	022620207	1,700.00
Rotor 12 x 1.5/2.0 mL, with lid (F-45-12-11)	022668498	438.00
Rotor 2 x PCR-strip, with lid (F-55-16-5-PCR)	022665821	328.00
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636243	34.20
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20

Centrifuges 5418/ 5418 R



Description
Centrifuges 5418 and 5418 R with their 18-place capacity rotors are specifically designed for low to medium capacity in 1.5/2.0 mL tubes and Microtainer®. Their speed of up to 16,873 x g allows for standard molecular biology and clinical applications. Both models have an especially low access height and are characterized by remarkably quiet operation.

- Product features**
- > Max. rotor capacity: 18 x 1.5/2.0 mL vessels
 - > Max. speed: 16,873 x g (14,000 rpm)
 - > Small footprint and low access height of 23 cm
 - > OptiBowl® design for quiet operation - even without a rotor lid
 - > Eppendorf QuickLock® rotor allows for fast and ergonomic lid locking
 - > Soft-touch one-finger lid closure for ergonomic operation
 - > Full digital display with time and speed display
 - > Separate short-spin key for quick centrifugation

- > Automatic lid opening at the end of the run - prevents sample warming and allows easy access to samples (only Centrifuge 5418)
- > Certified aerosol-tight rotor comes standard for safe centrifugation of hazardous samples

- Special features for Centrifuge 5418 R**
- > Temperature range from 0°C to +40 °C
 - > Guaranteed temperature of 4 °C at maximum rotational speed
 - > FastTemp™ function for quick pre-cooling and maximum temperature accuracy inside the rotor
 - > ECO power shut-off engages after 8 hours of nonuse to reduce energy consumption (46% over night) and extend compressor life (can be deactivated)
 - > The patented compressor technology reduces vibrations and protects your samples
 - > Built-in condensation drain to eliminate water accumulation in the rotor chamber

For more information go to www.eppendorf.com/centrifugation



Rotor FA-45-18-11 for 18 x 1.5/2.0 mL tubes comes standard with unique Eppendorf QuickLock aerosol-tight lid for fast and reliable locking

Technical specifications		
Model	5418	5418 R
Max. RCF	16,873 x g	16,873 x g
Speed	100 – 14,000 rpm (100 rpm steps)	100 – 14,000 rpm (100 rpm steps)
Max. capacity	18 x 1.5/2.0 mL	18 x 1.5/2.0 mL
Rotors available	1	1
Acceleration time	16 s	11 s
Deceleration time	18 s	12 s
Timer	30 s to 9:59 h, with continuous run function	30 s – 99 min, with continuous run function
Noise level	< 51 dB(A)	< 55 dB(A), with rotor lid: < 47 dB(A)
Max. power consumption	170 W	320 W
Dimensions (W x D x H)	8.2 x 11.8 x 8.3 in / 21 x 30 x 21 cm	11.7 x 18.2 x 9.8 in / 30 x 46 x 25 cm
Height (with open lid)	16.7 in / 43 cm	20 in / 52 cm
Weight w/o accessories	17 lb / 7.7 kg	48.5 lb / 22 kg
Cooling		refrigerated
Temperature control range		0 °C to +40 °C

Ordering information		
Description	Catalog No.	List USD
Centrifuge 5418, with Rotor FA-45-18-11 and rotor lid, 120 V/50 – 60 Hz	022620304	\$2,290.00
Centrifuge 5418 R, refrigerated, with Rotor FA-45-18-11 and rotor lid, 120 V/50 – 60 Hz	5401000137	6,390.00
Rotor FA-45-18-11, aerosol-tight, 45° angle, 18 places, max. tube diameter 11 mm, incl. rotor lid (aluminum)	022652061	743.00
Spare seals, for rotor lid FA-45-18-11, set of 5	022652109	145.00
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636243	34.20
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20

Centrifuges 5424/ 5424 R



Description

Centrifuge 5424 and Centrifuge 5424 R are the new laboratory standard. With their 24-place capacity and speed up to 21,130 x g they are perfectly equipped for all modern molecular biology applications in Eppendorf and PCR tubes. When working with spin columns kits, the Eppendorf Kit rotor® with raised rim solves the issue of open tube caps shearing off during the elution step. Refrigerated Centrifuge 5424 R features state of the art cooling technology to ensure energy efficiency and high temperature accuracy for maximum sample protection. For ease-of-operation and time savings, Centrifuge 5424 R cools down to 4 °C in only 8 minutes.

Product features

- > Max. rotor capacity: 24 x 1.5/2.0 mL vessels
- > Max. speed: 20,238 x g (14,680 rpm)
- > OptiBowl® design for quiet operation, even without a rotor lid
- > Soft-touch one-finger lid closure for ergonomic operation
- > SOFT brake to protect sensitive samples
- > Full digital display with time and speed display

- > Separate short-spin key for quick centrifugation
- > Automatic lid opening at the end of the run - prevents sample warming and allows easy access to samples (only Centrifuge 5424)
- > Certified aerosol-tight rotor comes standard for safe centrifugation of hazardous samples
- > Available as a rotary knob version for fast parameter selection, or keypad version for easy cleaning

Special features for Centrifuge 5424 R

- > Temperature range from -10 °C to +40 °C
- > Guaranteed temperature of 4 °C at maximum rotational speed
- > FastTemp function for quick pre-cooling of the centrifuge, e.g. from ~ 21 °C to 4 °C in only 8 minutes
- > ECO power shut-off engages after 8 hours of non-use to reduce energy consumption (40% over night) and extend compressor life (can be deactivated)
- > The patented compressor technology reduces vibrations and protects your samples
- > Built-in condensation drain to eliminate water accumulation in the rotor chamber

i For more information go to www.eppendorf.com/centrifugation



Technical specifications		
Model	5424	5424 R
Max. RCF	21,130 x g	21,130 x g
Speed	100 – 15,000 rpm (50 rpm steps)	100 – 15,000 rpm (50 rpm steps)
Max. capacity	24 x 1.5/2.0 mL	24 x 1.5/2.0 mL
Rotors available	4	4
Acceleration time	16 s	15 s
Deceleration time	18 s	16 s
Timer	30 s to 9:59 h, with continuous run function	30 s to 9:59 h, with continuous run function
SOFT brake function	yes	yes
Noise level	< 51 dB(A) with Rotor FA-45-24-11	< 54 dB(A), with rotor lid: < 48 dB(A) with Rotor FA-45-24-11
Max. power consumption	250 W	350 W
Dimensions (W x D x H)	9.3 x 12.6 x 8.9 in / 24 x 32 x 23 cm	11.4 x 18.9 x 10 in / 29 x 48 x 26 cm
Height (with open lid)	17 in / 44 cm	20 in / 51 cm
Weight w/o accessories	29.5 lb / 13.4 kg	46.3 lb / 21 kg
Cooling		refrigerated
Temperature control range		-10 °C to +40 °C

Ordering information

Description	Catalog No.		List USD
	Knob	Keypad	
Centrifuge 5424 with 24 x 1.5/2.0 mL aerosol-tight rotor (FA-45-24-11), 120 V/50–60 Hz	022620401	022620444	\$2,990.00
Centrifuge 5424 without rotor, 120 V/50–60 Hz	022620487	022620498	2,680.00
Centrifuge 5424 R refrigerated, with 24 x 1.5/2.0 mL aerosol-tight rotor (FA-45-24-11), 120 V/50–60 Hz	5404000537	5404000138	7,150.00
Centrifuge 5424 R refrigerated, without rotor, 120 V/50–60 Hz	5404000731	5404000332	6,310.00

Rotors for Centrifuge 5424/ 5424 R



24 x 1.5/2.0 mL rotor (FA-45-24-11)
(Catalog No. 022653008)

- > Max. speed: 21,130 x g (15,000 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Rotor lifetime: unlimited cycles



24 x 1.5/2.0 mL rotor, PTFE-coated (FA-45-24-11-Special)
(Catalog No. 022653041)

- > Max. speed: 21,130 x g (15,000 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance and easy cleaning
- > Rotor lifetime: unlimited cycles



18 x spin column kit rotor (F-45-48-11-Kit)
(Catalog No. 022653083)

- > Max. speed: 18,111 x g (15,000 rpm)
- > Max. capacity: 18 x spin columns or 1.5/2.0 mL tubes
- > Extended rim that protects tube caps from shearing off
- > Rotor lifetime: unlimited cycles



4 x PCR strip rotor (F-45-32-5-PCR)
(Catalog No. 022653121)

- > Max. speed: 18,615 x g (15,000 rpm)
- > Max. capacity: 4 x PCR strips
- > Rotor lifetime: unlimited cycles

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.



Adapter for 0.2 mL PCR Tubes
Ideal to spin down PCR Tubes after reaction setup. Adapter fits in any Eppendorf 1.5/2.0 mL rotor



Spin column kit rotor
Extended rim that protects the tube caps from shearing off



Watch video clips of Centrifuges 5424/R on our dedicated mobile website or www.eppendorf.com/centrifugation

Ordering information

Description	Catalog No.	List USD
24 x 1.5/2.0 mL rotor with aerosol-tight lid (FA-45-24-11)	022653008	\$ 907.00
Rotor lid, for FA-45-24-1, aerosol tight	022653024	252.00
24 x 1.5/2.0 mL rotor with aerosol-tight lid, PTFE-coated (FA-45-24-11-Special)	022653041	1,060.00
Rotor lid, for FA-45-24-11-Special, aerosol-tight	022653067	281.00
18 x 1.5/2.0 mL spin column kit rotor, including lid (F-45-18-11-Kit)	022653083	743.00
Rotor lid, for F-45-18-11-Kit	022653105	203.00
4 x PCR-strip rotor, including lid (F-45-32-5-PCR)	022653121	743.00
Rotor lid, for F-45-32-5-PCR	022653148	203.00
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636243	34.20
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20

Centrifuge 5427 R

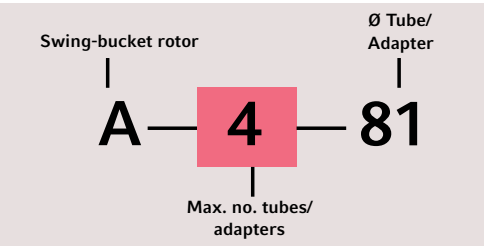
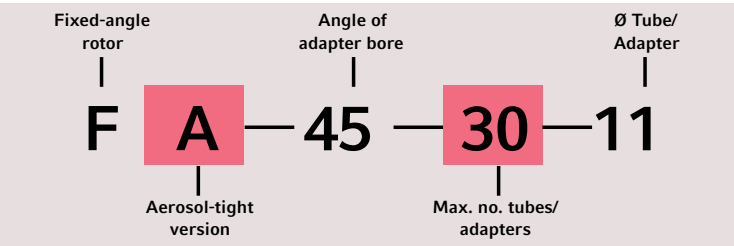


- 1. Extraordinary capacity:**
High capacity 48-place rotor significantly increases productivity to save you valuable time
- 2. Low noise level:**
Whisper quiet operation due to optimized sound design
- 3. Easy lid closure:**
Soft touch one-finger closure for ergonomic operation
- 4. Smart design:**
Compressor at the back saves valuable bench space
- 5. FastTemp function:**
For quick pre-cooling of the centrifuge, e.g., from ~ 23 °C to 4 °C in only 11 minutes
- 6. ECO shut-off:**
Can be programmed to engage after 1,2,4 or 8 hours of nonuse for maximum energy savings and extended compressor life
- 7. Condensation drain:**
Built-in condensation drain to eliminate water accumulation



Description
Centrifuge 5427 R was designed with high-throughput research applications in mind. With its aerosol-tight 48-place rotor it handles even the toughest challenges in a safe and reliable manner to provide you the efficiency boost you need. All aerosol-tight rotors, including the new rotors for Eppendorf Tubes® 5.0 mL as well as the 24 x 1.5/2.0 mL swing-bucket rotor are equipped with the Eppendorf QuickLock® lids for easy rotor lid opening and closing. Choose the Centrifuge 5427 R if a 24-place refrigerated microcentrifuge (e.g. our Centrifuge 5424 R) doesn't meet your needs regarding tube capacity and if you don't need the extra versatility our cross-over Centrifuge 5430 R can offer you.

- Product features**
- > Rotor capacity: 48 x 1.5/2.0 mL, 12 x 5.0 mL
 - > Max. speed: 25,000 x g (16,220 rpm)
 - > High capacity 48-place rotor significantly increases productivity to save you valuable time
 - > Whisper quiet operation due to optimized sound design
 - > Soft touch one-finger closure for ergonomic operation
 - > Temperature range from -10 °C to 40 °C
 - > FastTemp function for quick pre-cooling of the centrifuge, e.g., from ~ 23 °C to 4 °C in only 11 minutes
 - > ECO shut-off can be programmed to engage after 1,2,4 or 8 hours of nonuse for maximum energy savings and extended compressor life
 - > Built-in condensation drain to eliminate water accumulation
 - > Eppendorf QuickLock® rotor allows for fast and ergonomic lid locking



Rotor code
All Eppendorf rotors are identified using a simple, alphanumeric format that represents the technical specifications in a uniform series of letters and numbers.

i For more information go to www.eppendorf.com/centrifugation

Centrifuge 5427 R

Technical specifications	
Model	5427 R
Max. RCF	25,000 x g
Max. speed	16,220 rpm
Max. capacity	48 x 1.5/2.0 mL
Rotors available	9
Acceleration time	18 s
Deceleration time	18 s
Timer	10 s to 9:59 h
Noise level	< 46 dB(A) with Rotor F-45-48-11
Max. power consumption	550 W
Dimensions (W x D x H)	12.6 x 21.3 x 10 in / 31.9 x 54.0 x 25.4 cm
Weight w/o accessories	66.1 lb / 30 kg
Cooling	refrigerated
Temperature control range	-11 °C to 40 °C

Ordering information		
Description	Catalog No.	List USD
Centrifuge 5427 R, without rotor, 120 V	5409000136	\$7,270.00
Centrifuge 5427 R, 30 x 1.5/2.0 mL aerosol-tight QuickLock® rotor, 120 V	022620701	8,280.00
Centrifuge 5427 R, 48 x 1.5/2.0 mL aerosol-tight QuickLock rotor, 120 V	022620700	8,370.00
Centrifuge 5427 R, 24 x 1.5/2.0 mL aerosol-tight QuickLock rotor, 120 V	022620702	8,390.00
Centrifuge 5427 R, 24 x 1.5/2.0 mL swing-bucket aerosol-tight QuickLock rotor, 120 V	022620703	8,870.00
Centrifuge 5427 R, 12 x 5.0 mL aerosol-tight QuickLock rotor, 120 V	022620704	8,280.00



Watch video clips of Centrifuge 5427 R on our dedicated mobile website or www.eppendorf.com/centrifugation

i For more information go to www.eppendorf.com/centrifugation

Rotors for Centrifuge 5427 R



- 48 x 1.5/2.0 mL rotor (FA-45-48-11)**
(Catalog No. 5409710001)
- > Max. speed: 18,210 x g (12,700 rpm)
 - > Max. capacity: 48 x 1.5/2.0 mL tubes
 - > Aerosol-tight for safe centrifugation of hazardous samples
 - > Eppendorf QuickLock® lid provides fast and ergonomic lid locking
 - > Rotor lifetime: 100,000 cycles



- 48 x 1.5/2.0 mL rotor (F-45-48-11)**
(Catalog No. 5409712004)
- > Max. speed: 18,210 x g (12,700 rpm)
 - > Max. capacity: 48 x 1.5/2.0 mL tubes
 - > Rotor lifetime: 100,000 cycles



- 30 x 1.5/2.0 mL rotor (FA-45-30-11)**
(Catalog No. 5409706004)
- > Max. speed: 20,800 x g (14,000 rpm)
 - > Max. capacity: 30 x 1.5/2.0 mL tubes
 - > Aerosol-tight with Eppendorf QuickLock lid
 - > Eppendorf QuickLock® lid provides fast and ergonomic lid locking
 - > Rotor lifetime: unlimited cycles



- 30 x 1.5/2.0 mL rotor (F-45-30-11)**
(Catalog No. 540908007)
- > Max. speed: 20,800 x g (14,000 rpm)
 - > Max. capacity: 30 x 1.5/2.0 mL tubes
 - > Rotor lifetime: unlimited cycles

Rotors for Centrifuge 5427 R



24 x 1.5/2.0 mL rotor, High Speed (FA-45-24-11)
(Catalog No. 5409702009)

- > Max. speed: 25,000 x g (16,220 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid for fast and ergonomic lid locking
- > Rotor lifetime: unlimited cycles



24 x 1.5/2.0 rotor, for Spin Columns (FA-45-24-11-Kit)
(Catalog No. 5409704001)

- > Max. speed: 19,100 x g (13,200 rpm)
- > Rotor with higher edge for safe centrifugation of up to 24 spin columns
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid provides fast and ergonomic lid locking
- > Rotor lifetime: unlimited cycles



24 x 1.5/2.0 mL rotor, Swing Bucket (S-24-11-AT)
(Catalog No. 5409715003)

- > Max. speed: 16,049 x g (12,700 rpm)
- > Swing-bucket rotor for 24 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Perfect for phase-separation applications such as phenol-chloroform extraction
- > Eppendorf QuickLock® lid provides fast and ergonomic lid locking
- > Rotor lifetime: 100,000 cycles



12 x 5.0 mL rotor (FA-45-12-17)
(Catalog No. 5409700006)

- > Max. speed: 20,600 x g (14,000 rpm)
- > Max capacity: 12 x Eppendorf Tubes® 5.0 mL
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid provides fast and ergonomic lid locking
- > Rotor lifetime: 100,000 cycles
- > Adapter for 1.5/2.0 mL tubes, pk/4; Catalog No. 5820768002
- > Adapter for cryotubes, pk/4; Catalog No. 5820769009
- > Adapter for HPLC vials, pk/4; Catalog No. 5820770007

i For more information go to www.eppendorf.com/centrifugation



6 x PCR-Strip rotor (F-45-48-5-PCR)
(Catalog No. 5409714007)

- > Max. speed: 11,710 x g (10,500 rpm)
- > PCR strip rotor for up to 48 x 0.2 mL PCR tubes
- > Rotor lifetime: unlimited cycles

Ordering information

Description	Catalog No.	List USD
48 x 1.5/2.0 mL rotor, including aerosol-tight QuickLock® lid	5409710001	\$1,120.00
Spare seals, for rotor lid FA-45-48-11, set of 5	5409718002	267.00
48 x 1.5/2.0 mL rotor, including lid	5409712004	871.00
30 x 1.5/2.0 mL rotor, including aerosol-tight QuickLock® lid	5409706004	1,010.00
Spare seals, for rotor lid FA-45-30-11, set of 5	5820762004	267.00
30 x 1.5/2.0 mL rotor, including lid	5409708007	710.00
24 x 1.5/2.0 mL rotor, including aerosol-tight QuickLock® lid	5409702009	1,010.00
Spare seals, for rotor lid FA-45-24-11, set of 5	5409717006	267.00
24 x Spin column rotor, including aerosol-tight QuickLock® lid	5409704001	1,120.00
Spare seals, for rotor lid FA-45-24-11-Kit, set of 5	5820767006	267.00
24 x 1.5/2.0 mL swing-bucket rotor, including aerosol-tight QuickLock® lid	5409715003	1,600.00
Spare seals, for rotor lid S-24-11-AT, set of 5	5409719009	383.00
6 x PCR strip rotor, including lid	5409714007	789.00
12 x 5.0 mL rotor, including aerosol-tight QuickLock® lid	5409700006	1,320.00
Spare seals, for rotor lid FA-45-12-17, set of 5	5409716000	267.00
Adapter, for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820768002	43.10
Adapter, for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820769009	43.10
Adapter, for 1 HLPC tube, for all 5.0 mL rotors, set of 4 pcs.	5820770007	43.10
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636243	34.20
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20

i For more information go to www.eppendorf.com/centrifugation

Centrifuges 5430/ 5430 R



Description

Unique cross-over Centrifuges 5430 and 5430 R combine the best features of a microcentrifuge (small footprint) and multipurpose centrifuge (versatility) in one instrument. These centrifuges spin rotors for Eppendorf tubes and PCR strips as you would expect from any microcentrifuge. But that’s not all. In a compact size, Centrifuges 5430 and 5430 R also accommodate rotors for microplates and 15/50 mL conical tubes. Now, the rotor program has been expanded with additional Eppendorf QuickLock® rotors. This includes 48-place rotors (1.5/2.0 mL), a 16-place rotor for Eppendorf Tubes® 5.0 mL and a swing-bucket rotor (24 x 1.5/2.0 mL). With their unmatched versatility, Centrifuges 5430 and 5430 R are the flagship products among the Eppendorf microcentrifuge portfolio.

Product features

- > Max. rotor capacity: 48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP
- > Max. speed: 30,130 x g (17,500 rpm)
- > Remarkable versatility with 12 different rotors
- > Soft-touch one-finger lid closure for ergonomic operation

- > Menu-driven, multi lingual operation menu (English, German, French, Spanish) with large backlit display
- > 5 program keys for easy access to routine programs
- > Saves up to 50 user-defined programs
- > Automatic imbalance detection
- > Eppendorf QuickLock® – System for quickly opening and closing the rotor lid

Special features for Centrifuge 5430 R

- > Temperature range: -11 °C to +40 °C
- > The patented compressor technology reduces vibrations and protects your samples
- > Continuous cooling maintains a constant temperature after the run has been completed – your samples stay cool
- > FastTemp pro® function for programmable pre-cooling according to day and time
- > ECO shut-off engages after 8 hours of nonuse to reduce energy consumption (37% overnight) and extend compressor life (can be deactivated in menu)
- > Built-in condensation drain to eliminate water accumulation

i For more information go to www.eppendorf.com/centrifugation



The Eppendorf line-up of refrigerated microcentrifuges: 5418 R, 5424 R, 5427 R, 5430 R

Technical specifications		
Model	5430	5430 R
Max. RCF	30,130 x g	30,130 x g
Max. speed	17,500 rpm	17,500 rpm
Max. capacity	48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP	48 x 1.5/2.0 mL, 6 x 50 mL, 2 x MTP
Rotors available	12	12
Acceleration time	14 s	14 s
Deceleration time	15 s	15 s
Timer	30 s to 99:59 h, with continuous run function	30 s to 99:59 h, with continuous run function
SOFT brake function	yes	yes
Noise level	< 58 dB(A) with Rotor F-45-30-11	< 54 dB(A) with Rotor F-45-30-11
Max. power consumption	475 W	1,050 W
Dimensions (W x D x H)	13 x 16.3 x 9.8 in / 33 x 42 x 25 cm	15 x 25,2 x 11.7 in / 38 x 64 x 29 cm
Height (with open lid)	21.8 in / 56 cm	24.8 in / 63 cm
Weight w/o accessories	63.8 lb / 29 kg	123.5 lb / 56 kg
Cooling		refrigerated
Temperature control range		-11 °C to 40 °C

Ordering information			
Description	Catalog No.		List USD
Centrifuge 5430	Knob	Keypad	
with 48 x 1.5/2.0 mL aerosol-tight QuickLock® rotor, 120 V	022620515	022620513	\$ 5,020.00
with 30 x 1.5/2.0 mL aerosol-tight QuickLock rotor, 120 V	022620511	022620509	4,820.00
with 24 x Kit aerosol-tight QuickLock rotor, 120 V	022620557	022620541	5,020.00
with 16 x 5 mL aerosol-tight QuickLock rotor, 120 V	022620562	022620560	5,020.00
with 6 x 15/50 mL rotor, including adapters for 15 mL and 50 mL conical tubes, 120 V	022620580	022620576	5,790.00
with 2 x MTP/PCR plate rotor, 120 V	022620572	022620568	5,720.00
without rotor, 120 V	022620596	022620584	3,920.00
Centrifuge 5430 R (refrigerated)			
with 48 x 1.5/2.0 mL aerosol-tight QuickLock rotor, 120 V	022620625	022620603	9,460.00
with 30 x 1.5/2.0 mL aerosol-tight QuickLock rotor, 120 V	022620623	022620601	9,360.00
with 16 x 5 mL aerosol-tight QuickLock rotor, 120 V	022620642	022620638	9,480.00
with 6 x 15/50 mL rotor, including adapters for 15 mL and 50 mL conical tubes, 120 V	022620663	022620659	10,220.00
with 2 x MTP/PCR plate rotor, 120 V	022620656	022620645	10,020.00
without rotor, 120 V	022620689	022620667	8,340.00

Rotors for Centrifuge 5430/ 5430 R



48 x 1.5/2.0 mL (FA-45-48-11)¹⁾
(Catalog No. 5427754008)

- > Max. speed: 18,210 x g (12,700 rpm)
- > Max. capacity: 48 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid
- > Rotor lifetime: 100,000 cycles



48 x 1.5/2.0 mL (F-45-48-11)¹⁾
(Catalog No. 5427755004)

- > Max. speed: 18,210 x g (12,700 rpm)
- > Max. capacity: 48 x 1.5/2.0 mL tubes
- > Rotor lifetime: 100,000 cycles



30 x 1.5/2.0 mL (FA-45-30-11)
(Catalog No. 022654047)

- > Max. speed: 20,817 x g (14,000 rpm)
- > Max. capacity: 30 x 1.5/2.0 mL tubes
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance
- > Eppendorf QuickLock® lid for fast and ergonomic lid locking
- > Rotor lifetime: unlimited cycles



30 x 1.5/2.0 mL (F-45-30-11)
(Catalog No. 022654004)

- > Max. speed: 20,817 x g (14,000 rpm)
- > Max. capacity: 30 x 1.5/2.0 mL tubes
- > PTFE coating for increased chemical resistance
- > Rotor lifetime: unlimited cycles

¹⁾ Please note that rotors FA-45-48-11, F-45-48-11, S-24-11-AT, and FA-45-16-17 can be used for 120 V models starting with serial number: 5430 (> 16,000), 5430 R(> 16,000). If you own a unit with an older serial number please contact Eppendorf Customer Support to learn about your options.

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.



24 x 1.5/2.0 mL High Speed (FA-45-24-11-HS)
(Catalog No. 022654080)

- > Max. speed: 30,130 x g (17,500 rpm)
- > Max. capacity: 24 x 1.5/2.0 mL tubes
- > Extremely fast separation results
- > Aerosol-tight for safe centrifugation of hazardous samples
- > PTFE coating for increased chemical resistance
- > Rotor lifetime: unlimited cycles



24 x Spin column (FA-45-24-11-Kit)
(Catalog No. 022654128)

- > Max. speed: 19,090 x g (13,200 rpm)
- > Rotor with higher edge for safe centrifugation of up to 24 spin columns
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid for fast and ergonomic lid locking
- > Rotor lifetime: unlimited cycles



24 x 1.5/2.0 mL Swing-Bucket (S-24-11-AT)¹⁾
(Catalog No. 5427757007)

- > Max. speed: 16,049 x g (12,700 rpm)
- > Swing-bucket rotor for 24 x 1.5/2.0 mL tubes
- > Aerosol-tight with Eppendorf QuickLock® lid
- > Perfect for phase-separation applications such as phenol-chloroform
- > Rotor lifetime: 100,000 cycles extraction



16 x 5.0 mL (FA-45-16-17)¹⁾
(Catalog No. 5427750002)

- > Max. speed: 21,191 x g (14,200 rpm)
- > Max. capacity: 16 x Eppendorf Tubes® 5.0 mL
- > Aerosol-tight for safe centrifugation of hazardous samples
- > Eppendorf QuickLock® lid
- > Rotor lifetime: 100,000 cycles
- > Adapter for 1.5/2.0 mL tubes, pk/4; Catalog No. 5820768002
- > Adapter for cryotubes, pk/4; Catalog No. 5820769009
- > Adapter for HPLC vials, pk/4; Catalog No. 5820770007

Rotors for Centrifuge 5430/ 5430 R



6 x 15/50 mL Conical (F-35-6-30)
(Catalog No. 022654306)

- > Max. speed: 7,745 x g (7,830 rpm)
- > Rotor for 6 x 15/50 mL conical or 12 x Vacutainer® tubes
- > Rotor lifetime: 100,000 cycles



2 x MTP/PCR plate (A-2-MTP)
(Catalog No. 022654403)

- > Max. speed: 2,204 x g (4,680 rpm)
- > 2-place swing-bucket rotor for MTP, PCR and deepwell plates
- > Windshield design for whisper quiet operation
- > Rotor lifetime: 100,000 cycles



8 x PCR-strip (F-45-64-5-PCR)
(Catalog No. 022654209)

- > Max. speed: 13,543 x g (11,800 rpm)
- > PCR strip rotor for up to 64 x 0.2 mL PCR tubes
- > Rotor lifetime: 100,000 cycles



18 x cryotubes or HPLC vials (F-45-18-17-Cryo)
(Catalog No. 022654161)

- > Max. speed: 8,324 x g (8,900 rpm)
- > 18-place rotor for Cryovials® and HPLC tubes
- > Rotor lifetime: unlimited cycles
- > Adapter HPLC vials; Catalog No. 5427708006

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.

Ordering information

Description	Catalog No.	List USD
48 x 1.5/2.0 mL rotor, including aerosol-tight QuickLock® lid	5427754008	\$1,120.00
Spare seals, for rotor lid FA-45-48-11, set of 5	5409718002	267.00
48 x 1.5/2.0 mL rotor, including lid	5427755004	871.00
30 x 1.5/2.0 mL rotor, including aerosol-tight QuickLock® lid	022654047	1,010.00
Spare seals, for rotor lid FA-45-30-11, set of 5	5820762004	267.00
30 x 1.5/2.0 mL rotor, including lid	022654004	710.00
24 x 1.5/2.0 mL rotor, including aerosol-tight lid	022654080	1,010.00
Spare seals, for rotor lid FA-45-24-11, set of 5	5409717006	267.00
24 x spin column rotor, including aerosol-tight QuickLock® lid	022654128	1,120.00
Spare seals, for rotor lid FA-45-24-11-Kit, set of 5	5820767006	267.00
24 x 1.5/2.0 mL swing-bucket rotor, including aerosol-tight QuickLock® lid	5427757007	1,600.00
Spare seals, for rotor lid S-24-11-AT, set of 5	5409719009	383.00
16 x 5.0 mL rotor, including aerosol-tight QuickLock® lid	5427750002	1,120.00
Spare seals, for rotor lid FA-45-12-17, set of 5	5409716000	267.00
6 x 15/50 mL rotor, including lid, with adapters for 15 mL/50 mL conical tubes	022654306	1,900.00
2 x MTP/PCR plate rotor, including lid, with plate buckets	022654403	1,810.00
8 x PCR Strip rotor, including lid, with adapters	022654209	1,120.00
18 x cryo tubes rotor, including lid, with cryotube adapters	022654161	710.00
Adapter, for 1 – 2 mL cryo tubes, max. length 50 mm, for Rotor F-45-18-17-Cryo, set of 6 pcs.	022639498	88.20
Adapter, for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820769009	43.10
Adapter, for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820768002	43.10
Adapter, for 1 HLPC tube, for all 5.0 mL rotors, set of 4 pcs.	5820770007	43.10
Adapter, for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter, for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636243	34.20
Adapter, for 1 HPLC vessel 1.5 mL, for Rotor F-45-18-17-Cryo	5427708006	240.00
Adapter, for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20

Adapter options 6 x 15/50 mL conical tube rotor

Adapter	Rotor capacity ³⁾	Max. tube dimensions Ø x L	Max. RCF	For bore hole	Catalog No. ⁴⁾	List USD
13 mm round	12	13 x 65 – 89 mm	6,443 x g	small	5427740007	\$151.00
			6,100 x g	large	5427742000	151.00
13 mm round	12	13 x 90 – 110 mm	7,471 x g	small	5427741003	151.00
			7,129 x g	large	5427743006	151.00
16 mm round	12	16 x 75 – 105 mm	7,005 x g	small	022654512	151.00
		16 x 90 – 105 mm	7,005 x g	large	022654524	151.00
17 mm round	12	17 x 90 – 125 mm	7,745 x g	small	022654538	151.00
			7,403 x g	large	022654545	151.00
Eppendorf Tubes®	12	17.5 x 80 mm	6,237 x g	small	5427746005	151.00
5.0 mL		17.5 x 80 mm	7,129 x g	large	5427747001	151.00
15 mL conical	6	17.5 x 100 – 125 mm	7,540 x g	small	022654365	151.00
30 mL round	6	26 x 92 – 112 mm	7,087 x g	large	022654556	151.00
50 mL round	6	29 x 95 – 125 mm	7,581 x g	large	022654567	151.00
50 mL conical	6 ¹⁾²⁾	29.5 x 100 – 125 mm	7,197 x g	large	022654349	151.00
Centriprep®	6	29.5 x 100 – 125 mm	7,567 x g	large	022654331	151.00

¹⁾ Three sets of 2 included within 6 x 15/50 mL rotor package. ²⁾ Adapter accommodates skirted 50 mL conical tubes. ³⁾ Please perform a manual test to determine the actual loading capacity.

⁴⁾ Set of 2

Centrifuges 5702/ 5702 R/ 5702 RH



Description

The 5702 family of low speed, general purpose centrifuges was especially designed to meet the requirement of low- to mid-throughput clinical research and cell culture labs. They are compact in design so that one can fit comfortably on every lab bench, quiet in operation to benefit your work environment, and provide 6 different rotor options to accommodate any type of tube.

The right model for your application:

- > Centrifuge 5702 for standard applications
- > Refrigerated Centrifuge 5702 R for heat sensitive samples
- > Heated and refrigerated Centrifuge 5702 RH allows centrifugation under biological conditions to improve cell viability for more accurate results in downstream applications (e.g. cell cultivation)

Product features

- > Max. speed: 3,000 x g (4,400 rpm)
- > Very compact footprint to fit on every lab bench
- > Very quiet operation to benefit your environment
- > Low access height for simple loading and unloading of samples
- > SOFT brake function for slow acceleration and braking. Optimized for cell separation by gradient centrifugation
- > "At set RPM" function starts the timer when the selected rotational speed is reached for reproducible centrifugation runs
- > Key lock to prevent unintentional adjustments
- > Stainless steel rotor chamber is rust-free and easy to clean
- > Electronic imbalance detection for maximum safety

Special features for Centrifuge 5702 R and Centrifuge 5702 RH

- > Temperature settings from -9 to 40 C (42 C in 5702 RH only)
- > FastTemp function for fast precooling
- > Standby cooling keeps the 5702 R at set temperature when lid is closed
- > ECO shut-off engages after 8 hours of non-use to reduce energy consumption and extend compressor life
- > Two program keys to store routine procedures
- > Active heating guarantees high temperature accuracy during the entire centrifugation cycle (only 5702 RH)

i For more information go to www.eppendorf.com/centrifugation



Centrifuge 5702 display



Centrifuges 5702 R and 5702 RH display

Technical specifications			
Model	5702	5702 R	5702 RH
Max. RCF	3,000 x g	3,000 x g	3,000 x g
Speed	100 – 4,400 rpm (100 rpm steps)	100 – 4,400 rpm (100 rpm steps)	100 – 4,400 rpm (100 rpm steps)
Max. capacity	4 x 100 mL	4 x 100 mL	4 x 100 mL
Rotors available	6	6	6
Acceleration time	25 s	25 s	25 s
Deceleration time	25 s	25 s	25 s
Timer	0 – 99 min, with continuous run function	0 – 99 min, with continuous run function	0 – 99 min, with continuous run function
SOFT brake function	yes	yes	yes
Noise level	< 51 dB(A) with Rotor A-4-38	< 45 dB(A) with Rotor A-4-38	< 45 dB(A) with Rotor A-4-38
Max. power consumption	200 W	380 W	380 W
Dimensions (W x D x H)	12.5 x 15.6 x 9.5 in / 32 x 40 x 24 cm	15 x 22.8 x 10.2 in / 38 x 58 x 26 cm	15 x 22.8 x 10.2 in / 38 x 58 x 26 cm
Height (with open lid)	20.7 in / 53 cm	23.4 in / 60 cm	23.4 in / 60 cm
Weight w/o accessories	44 lb / 20 kg	78 lb / 36 kg	78 lb / 36 kg
Cooling		refrigerated	refrigerated/heated
Temperature control range	–	-9 °C to 40 °C	-9 °C to 42 °C



Ordering information	5702		5702 R		5702 RH	
Description	Catalog No.	List USD	Catalog No.	List USD	Catalog No.	List USD
Application-driven packages						
Cell culture package, 120 V	022628102	\$3,850.00	022628113	\$6,830.00	022628124	\$7,510.00
Clinical package, 120 V	022628001	3,850.00	022628012	6,830.00	022628023	7,510.00
Centrifuge options						
with 4 x 100 mL rotor (A-4-38), 120 V	022629883	2,960.00	022629905	6,150.00	022629921	6,840.00
with 4 x 100 mL rotor (A-4-38), 230 V	022629888	2,960.00	022629916	6,150.00	N/A	
without rotor, 120 V	022626001	2,310.00	022626205	5,680.00	022626213	6,690.00

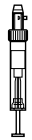
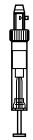
Clinical package includes the centrifuge, an A-4-38 swing-bucket rotor with 4 x 100 mL round buckets, 4 adapters for blood tubes with an outer diameter of 13 mm (2 x 022639242) and 4 adapters for 16 mm tubes (2 x 022639269). Each adapter holds 4 tubes for 16 tubes per run, max speed 2,850 x g (4,400 rpm).
Cell Culture package includes the centrifuge, an A-4-38 swing-bucket rotor with 4 x 100 mL round buckets, 4 adapters for 15 mL conical tubes (2 x 022639200) and 4 adapters for 50 mL conical tubes (2 x 022639226). Each adapter holds 2 x 15 mL conical tubes or one 50 mL tube for 8 or 4 tubes per run, respectively. Max speed of 3,000 x g (4,400 rpm).

4 x 100 mL Swing-Bucket Rotor (A-4-38) with Round Buckets



4 x 100 mL Swing-Bucket rotor with round buckets

- > Maximum speed: 3,000 × g (4,400 rpm)
- > Standard rotor for centrifugation of blood collection tubes or 15/50 mL conical tubes
- > Round buckets for vessels with 1.5 – 100 mL
- > Wide variety of adapters for all blood collection tubes and cell culture tube types
- > Aerosol-tight caps for safe centrifugation of hazardous samples optionally available
- > Rotor lifetime: 100,000 cycles

							
Tube volume	1.5 – 2.0 mL	1.1 – 1.4 mL	2 – 7 mL	2.6 – 7 mL	4 – 10 mL	Eppendorf Tubes® 5.0 mL	9 – 15 mL
Max. tube diameter	11 mm	8.5 mm	12.5 mm	13.5 mm	16 mm	17 mm	17.5 mm
Max. vessel height	43 mm	100 mm	100 mm	100 mm	100 mm	60 mm	100 mm
Max. vessel height for use with cap/lid ¹⁾	43 mm	100 mm	100 mm	100 mm	100 mm	60 mm	100 mm
Adapter							
Number of vessels per adapter/rotor	4/16	5/20	5/20	4/16	4/16	1/4	4/16
Bottom shape	round	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical	round
Centrifugation radius	134 mm	132 mm	132 mm	132 mm	132 mm	136 mm	130 mm
Max. RCF	2,900 × g	2,850 × g	2,850 × g	2,850 × g	2,850 × g	2,943 × g	2,800 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	022639277	022639285	022639102	022639242	022639269	5702733008	022639129
List USD	\$325.00	\$325.00	\$325.00	\$325.00	\$325.00	\$162.00	\$325.00

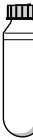
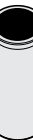
¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.

Ordering information

Description	Catalog No.	List USD
4 x 100 mL swing bucket rotor		
incl. 4 round buckets 100 mL	022639048	\$800.00
without buckets	022639064	325.00
Round bucket 100 mL, for Rotor A-4-38, set of 4	022639081	727.00
Aerosol-tight caps for 100 mL round buckets, set of 2	022639293	118.00

						
15 mL conical	15 mL conical	25 mL	20 – 30 mL	50 mL	50 mL conical	100 mL
17.2 mm	17.2 mm	25 mm	26 mm	29 mm	30 mm	38 mm
121 mm	121 mm	100 mm	123 mm	123 mm	115 mm	106 mm
120 mm	–	100 mm	116 mm	116 mm	115 mm	106 mm
						
1/4	2/8	1/4	1/6	1/6	1/4	1/4
conical	conical	round	round	round	conical	round
137 mm	137 mm	135 mm	135 mm	135 mm	135 mm	135 mm
3,000 × g	3,000 × g	2,900 × g	2,900 × g	2,900 × g	2,900 × g	2,900 × g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
022639188	022639200	022639145	022637240	022637258	022639226	022639161
\$179.00	\$325.00	\$179.00	\$166.00	\$166.00	\$179.00	\$179.00

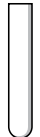
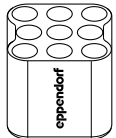
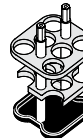
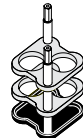
4 x 100 mL Swing-Bucket Rotor (A-4-38) with Rectangular Buckets



4 x 100 mL Swing-Bucket Rotor with Rectangular Buckets

- > Maximum speed: 2,750 × g (4,400 rpm)
- > Rectangular buckets for vessels with 5 – 25 mL
- > Rotor lifetime: 100,000 cycles



						
Tube volume	round-bottom tubes	5 – 7 mL	9 mL	15 mL	25 mL	20 mL
Max. tube diameter	12 mm	13 mm	14.5 mm	17.5 mm	25 mm	22 mm
Max. vessel height	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Adapter						
Number of vessels per adapter/rotor	9/36	10/40	8/32	6/24	2/8	4/16
Bottom shape	round	flat	flat	flat	flat	flat
Centrifugation radius	119 mm	127 mm	127 mm	127 mm	127 mm	127 mm
Max. RCF	2,577 × g	2,750 × g	2,750 × g	2,750 × g	2,750 × g	2,750 × g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5702763004	022639323	022639340	022639366	022639391	022639382
List USD	\$166.00	\$166.00	\$166.00	\$166.00	\$166.00	\$166.00

Ordering information

Description	Catalog No.	List USD
4 x 100 mL swing bucket rotor, with rectangular buckets	022639304	\$1,040.00
Rectangular bucket 90 mL, for Rotor A-4-38, set of 4	022639307	561.00

Rotors 5702/ 5702 R/ 5702 RH



- 8 x 15 mL swing-bucket (A-8-17)**
(Catalog no. 022639501)
- > Maximum speed: 2,800 × g (4,400 rpm)
 - > Low capacity rotor for centrifugation of 15 mL conical tubes or 15 mL glass tubes
 - > Adapters for 15 mL conical tubes and rubber mat inserts for glass tubes optionally available
 - > Rotor lifetime: 75,000 cycles



- 24 x 1.5/2.0 mL (F-45-24-11)**
(Catalog no. 022639471)
- > Maximum speed: 1,770 × g (4,400 rpm)
 - > Fixed-angle rotor for 24 × 1.5/2.0 mL tubes
 - > Quiet centrifugation even without rotor lid
 - > Adapters optionally available for:
 - 0.2 mL PCR tubes (5425 715.005)
 - 0.4 mL centrifuge tubes (5425 717.008)
 - 0.5 mL micro test tubes and Microtainer® tubes (5425716001)
 - > Rotor and adapters are autoclavable (121 °C, 20 min)
 - > Rotor lifetime: unlimited cycles



- 30 x 15 mL fixed-angle (F-35-30-17)**
(Catalog no. 022639404)
- > Maximum speed: 2,750 × g (4,400 rpm)
 - > High capacity rotor for 20 × 15 mL conical tubes or 30 × 15 mL glass tubes
 - > Inserts for 15 mL conical tubes and rubber mats for use with glass tubes are included
 - > Also accommodates twenty 16 x 125 glass tubes
 - > Rotor lifetime: 100,000 cycles



- 18 x Cryotubes or HPLC vials (F-45-18-17-Cryo)**
(Catalog no. 022639480)
- > Maximum speed: 1,840 × g (4,400 rpm)
 - > Quiet centrifugation even without rotor lid
 - > Centrifugation of 1 – 2 mL Cryotubes (max. 13 mm Ø, use with adapter) and tubes with screw cap (max. 17 mm Ø, no adapter required)
 - > Rotor and adapters are autoclavable (121 °C, 20 min)
 - > Rotor lifetime: unlimited cycles

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.

Ordering information

Description	Catalog No.	List USD
8 x 15 mL swing-bucket rotor (A-8-17) , without adapter, without rubber mats	022639501	\$318.00
Form inserts , for 15 mL conical tubes, set of 8	022639528	138.00
Rubber mats , for 15 mL round bottom or glass tubes, set of 8	022639510	36.40
30 x 15 mL Fixed-angle rotor (F-35-30-17)		
incl. 30 steel sleeves for 15 mL vessels, with 20 adapters for conical tubes and 30 rubber mats for round-bottom tubes	022639404	850.00
incl. 10 steel sleeves for 15 mL vessels, with 10 adapters for conical tubes and 10 rubber mats for round-bottom tubes	022639421	520.00
Spare steel sleeves , for rotor F-35-30-17, set of 10	022639439	273.00
Form inserts , for 15 mL conical tubes, set of 10	022639447	173.00
Rubber mats , 17 mm, for 15 mL round bottom tubes, set of 10	022639455	43.80
24 x 1.5/2.0 mL rotor (F-45-24-11) , without lid	022639471	561.00
Adapter , for 0.5 mL tubes and BD Microtainer® tubes, set of 6	022636227	34.20
Adapter , for 0.4 mL tubes, set of 6	022636243	34.20
Adapter , for 0.2 mL PCR tubes, set of 6	022636260	34.20
18 x Cryotubes rotor (F-45-18-17-Cryo) , without rotor lid, without adapters	022639480	651.00
Adapter , for 1-2 mL cryotubes, set of 6	022639498	88.20
Adapter , for 12 x 32 mm HPLC vials, set of 18	5427708006	240.00

Centrifuge 5804/5804 R and 5810/5810 R



Description

Eppendorf Centrifuges 5804/5804 R and 5810/5810 R with their renowned quality and reliability offer you cost efficient solutions for your medium- to high-throughput applications - now and in the future. Centrifuge 5804/5804 R is a high speed centrifuge for medium capacity needs. It allows for molecular applications in tubes up to 250 mL and offers additional swing-bucket and fixed-angle rotors as well as deepwell plate capacity for increased versatility. Centrifuge 5810/5810 R is a workhorse for medium to high-throughput laboratories. It combines extraordinary versatility and capacity for both tubes and plates with an extraordinary compact footprint.



Watch video clips of Centrifuge 5810 R incl. the new rotor generation on our optimized webpage for mobile devices or www.eppendorf.com/centrifugation

Product features

- > Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 750 mL
- > Plate rotor for centrifugation of all types of MTP, PCR, cell culture, or deepwell plates
- > Fixed-angle rotors for high-speed molecular biology applications in tubes from 0.2 mL to 85 mL
- > High centrifugation speed of up to 20,913 x g (14,000 rpm)
- > Aerosol-tight Eppendorf QuickLock® caps and lids for easy, one-hand operation
- > Centrifuge lid with soft-touch lid closure
- > Low access height of 11 inches for easy loading and unloading of samples
- > Quiet operation to improve your work environment
- > Compact footprint saves valuable bench space
- > Automatic rotor recognition and imbalance detection for maximum operational safety

Additional features of refrigerated Centrifuges 5804 R and 5810 R

- > Temperature range from -9 °C to 40 °C
- > FastTemp function for fast pre-cooling
- > Standby cooling function holds temperature when centrifuge is not in use
- > ECO shut-off engages after 8 hours of non-use to reduce energy consumption and to extend compressor life
- > Dynamic compressor control (DCC) technology for optimized cooling performance

i For more information go to www.eppendorf.com/centrifugation

Rolling cabinet



Description

If space is a limited resource in your lab, Eppendorf’s rolling cabinet can give you the freedom and flexibility to use your Centrifuge 5804/5804 R or 5810/5810 R wherever you need it. Use the rolling cabinet if there is not enough space on the regular lab bench or to transport and use the centrifuge in other labs. The included drawer provides extra storage space for your rotors and adapters.

Product features

- > Rolling cabinet with closed centrifuge fits under standard 90 cm lab benches
- > With 4 castors (2 lockable) and drawer
- > Dimensions (W x D x H): 70 x 62 x 45 cm
- > Weight: 88 lb / 40 kg
- > Height with 5810 R (lid closed): 31.75 in

Ordering information		
Description	Catalog No.	List USD
Rolling cabinet, for Centrifuge 5804/5804 R and 5810/5810 R	5821020010	\$2,475.00

Centrifuge 5804/5804 R and 5810/5810 R

Technical specifications				
Model	5804	5804 R	5810	5810 R
Max. RCF with fixed-angle rotor	20,913 x g	20,913 x g	20,913 x g	20,913 x g
Max. RCF with swing-bucket rotor	4,500 x g	4,500 x g	4,500 x g	4,500 x g
Max. RCF with plate rotor	2,250 x g	2,250 x g	3,486 x g	3,486 x g
Speed	200 – 14,000 rpm (10 rpm steps)	200 – 14,000 rpm (10 rpm steps)	200 – 14,000 rpm (10 rpm steps)	200 – 14,000 rpm (10 rpm steps)
Max. capacity	4 x 250 mL/ 2 x 5 MTP	4 x 250 mL/ 2 x 5 MTP	4 x 750 mL/ 4 x 4 MTP	4 x 750 mL/ 4 x 4 MTP
Rotors available	12	12	18	18
Acceleration/braking ramps	10/10	10/10	10/10	10/10
Number of programs	35 user-defined programs	35 user-defined programs	35 user-defined programs	35 user-defined programs
Timer	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin	1 min to 99 min, with continuous run function, short-spin
Temperature range	–	-9 °C to 40 °C	–	-9 °C to 40 °C
Noise level				
Rotor S-4-104 (4x750 mL)	–	–	<70 dB(A)	<56 dB(A)
Rotor S-4-72 (4x250 mL)	<62 dB(A)	<58 dB(A)	–	–
Rotor FA-45-6-30 (6x50 mL)	<55 dB(A)	<54 dB(A)	<56 dB(A)	<55 dB(A)
Max. power consumption	900 W	1,650 W	900 W	1,650 W
Dimensions (W x D x H)	18 x 20 x 13 in / 47 x 55 x 34 cm	25 x 20 x 13 in / 64 x 55 x 34 cm	21 x 21 x 13 in / 54 x 61 x 35 cm	28 x 21 x 13 in / 70 x 61 x 35 cm
Height (with open lid)	29 in / 74 cm	29 in / 74 cm	31 in / 80 cm	31 in / 80 cm
Weight w/o accessories	121 lb / 55 kg	176 lb / 80 kg	150 lb / 68 kg	218 lb / 99 kg

Ordering information		5804		5804 R		
Model	Standard		Standard		20 A	
Description	Catalog No.	List USD	Catalog No.	List USD	Catalog No.	List USD
Application-driven packages, (120 V; 50/60 Hz)						
Cell culture package (4 x 250 mL)	022628149	\$7,650.00	022628153	\$10,300.00	–	
Cell culture package (4 x 100 mL)	022628135	6,950.00	022628146	9,780.00	–	
High-Speed 15/50 mL package (6 x 50 mL conical)	022628211	7,850.00	–		–	
13 and 16 mm BT package (4 x 250 mL)	022628048	7,650.00	022628051	10,300.00	–	
13 and 16 mm BT package (4 x 100 mL)	022628034	6,950.00	022628045	9,780.00	–	
Deepwell plate package (A-2-DWP)	022628203	6,870.00	022628225	10,500.00	–	

Centrifuge options						
with 4 x 250 mL swing-bucket rotor (S-4-72), 120 V	5804000579	7,160.00	5805000572	10,180.00	–	
with 4 x 100 mL swing-bucket rotor (A-4-44), 120 V	022629948	6,470.00	022629964	9,560.00	022629981	\$9,560.00
without rotor, 120 V	022622501	5,230.00	022623508	8,910.00	022625080	8,910.00
without rotor, 230 V	022622552	5,230.00	022623559	8,910.00	–	

Ordering information		5810		5810 R		
Model	Standard		Standard		20 A	
Description	Catalog No.	List USD	Catalog No.	List USD	Catalog No.	List USD
Application-driven packages, (120 V; 50/60 Hz)						
Cell culture package (4 x 750 mL)	022628185	\$10,350.00	022628187	\$13,300.00	022628188	\$13,300.00
Cell culture package (4 x 500 mL)	022628179	9,650.00	022628180	12,850.00	022628181	12,850.00
Cell culture package (4 x 250 mL)	022628157	8,850.00	022628168	12,000.00	022628169	12,000.00
High-Speed 15/50 mL package (6 x 50 mL conical)	–		022628257	12,850.00	022628258	12,850.00
13 and 16 mm BT package (4 x 750 mL)	022628090	10,350.00	022628092	13,300.00	–	
13 and 16 mm BT package (4 x 500 mL)	022628078	9,650.00	022628089	12,850.00	–	
13 and 16 mm BT package (4 x 250 mL)	022628056	8,850.00	022628067	12,000.00	–	

Centrifuge options						
with 4 x 750 mL swing-bucket rotor (S-4-104), 120 V	022627110	9,890.00	022627122	13,000.00	022627133	13,000.00
with 4 x 500 mL swing-bucket rotor (A-4-81), 120 V	022627066	9,340.00	022627082	12,600.00	022627104	12,600.00
with 4 x 250 mL swing-bucket rotor (A-4-62), 120 V	022627007	8,500.00	022627023	11,700.00	022627040	11,700.00
without rotor, 120 V	022625004	6,730.00	022625501	10,400.00	022625101	10,400.00
without rotor, 230 V	022625055	6,730.00	022625551	10,400.00	–	

Cell Culture package includes a centrifuge and swing-bucket rotor plus the following adapter (sets of 2) for 15 mL and 50 mL conical tubes: 5804/R with 4 x 100 mL rotor = 2 x 022637606, 2 x 022637665; 5804/R with 4 x 250 mL rotor = 2 x 5804783000, 2 x 5804784006; 5810/R with 4 x 250 mL rotor = 2 x 022638289, 2 x 022638351; 5810/R with 4 x 500 mL rotor = 2 x 022638742, 2 x 022638769; 5810/R with 4 x 750 mL rotor = 2 x 5825734009, 2 x 5825733002.

High-Speed 15/50 mL package includes the listed centrifuge and 6 x 50 mL conical fixed-angle rotor FA-45-6-30 plus 7 adapters for 15 mL conical tubes (1 x 5820718005).

13 and 16 mm BT package includes a centrifuge and swing-bucket rotor plus following adapter (sets of 2) for 13 mm and 16 mm tubes: 5804/R with 4 x 100 mL = 2 x 022637541, 2 x 022637568; 5804/R with 4 x 250 mL = 2 x 5804789008, 2 x 5804791002; 5810/R with 4 x 250 mL rotor = 2 x 022638246, 2 x 022638262; 5810/R with 4 x 500 mL rotor = 2 x 022638718, 2 x 022638721; 5810/R with 4 x 750 mL rotor = 2 x 5825738004, 2 x 5825736001.

Plate package includes the listed centrifuge and deepwell plate rotor A-2-DWP. Maximum loading height of A-2-DWP is 89 mm per bucket.

Overview of the Main Rotors

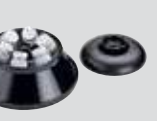
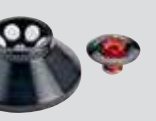
				
Model	Rotor S-4-104	Rotor A-4-81	Rotor A-4-62	Rotor S-4-72
Max. capacity	4 x 750 mL	4 x 500 mL	4 x 250 mL	4 x 250 mL
Lock	aerosol-tight QuickLock	aerosol-tight	aerosol-tight	
5804/5804 R				■
5810/5810 R	■	■	■	■
Positioning	High-capacity swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Medium to high capacity swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Economic swing-bucket rotor for blood, bacteria, cell culture and plate centrifugation	Economic swing-bucket rotor for blood, bacteria, cell culture centrifugation
Aerosol-tightness	yes	yes	yes	no
Max. RCF	3,214 x g	3,220 x g	3,220 x g	3,234 x g
Max. speed	3,900 rpm	4,000 rpm	4,000 rpm	4,200 rpm
Eppendorf Tube® 5.0 mL and 15 mL conical	56	48	36	32
50 mL conical	28	20/28 ¹⁾	16	16
13 mm blood tube	92	100	60	56
16 mm blood tube	80	64	48	52
1.5/2 mL micro tube	200	96	64	104
MTP / DWP	16 / 4	16 / 4	16 / 4	–

¹⁾ Maximum capacity with dedicated 50 mL bucket. ²⁾ Max. speed in Centrifuge 5810 R, lower speed applies to Centrifuge 5804/5804 R/5810.

Advanced Rotor Design – Swing-Bucket Rotors



- Improved energy efficiency**
The new round buckets have been designed to be especially aerodynamic. The result is a more efficient design that reduces power consumption by up to 48 %.
- Longer rotor lifetime**
The new rotor generation of both swing-bucket and fixed-angle rotors has been designed with a longer lifetime in mind.
- Product features**
- > New Eppendorf QuickLock® caps for one-hand operation
 - > Significantly improved handling, easy operation with one or two hands
 - > Handle allows the closed bucket to be carried to the biosafety cabinet where it can be opened in a safe environment.
 - > Aerosol-tightness has been tested and verified by Public Health England, Porton Down, UK

					
Rotor A-4-44	Rotor A-2-DWP-AT	Rotor A-2-DWP	Rotor F-34-6-38	Rotor FA-45-6-30	Rotor FA-45-48-11
4 x 100 mL	2 x 6 MTP	2 x 5 MTP	6 x 100 mL	6 x 50 mL	48 x 2 mL
aerosol-tight	aerosol-tight			aerosol-tight QuickLock	aerosol-tight QuickLock
■		■	■	■	■
■	■	■	■	■	■
High-speed swing-bucket rotor for platelet poor plasma, blood, bacteria and cell culture	Aerosol-tight deepwell plate rotor for safe centrifugation of hazardous samples	Economic deepwell plate rotor	High-speed rotor suitable for molecular applications in tubes up to 100 mL	Aerosol-tight high-speed rotor for safe centrifugation of hazardous samples	Aerosol-tight microcentrifuge tube rotor for safe centrifugation of hazardous samples
yes	yes	no	no	yes	yes
4,500 x g	3,486 x g	2,250 x g	18,500/15,500 x g ²⁾	20,130/16,639 x g ²⁾	19,083 x g
5,000 rpm	4,500 rpm	3,700 rpm	12,000/11,000 rpm	12,100/11,000 rpm	13,000 rpm
16	–	–	6	6	–
4/8 ¹⁾	–	–	6	6	–
36	–	–	18	6	–
28	–	–	12	6	–
48	48	48	24	–	48
–	12 / 4	10 / 4	–	–	–

Advanced Rotor Design – Fixed-Angle Rotors



- Low rotor weight**
Eppendorf's fixed-angle rotors are among the lightest in the industry to improve handling and operational safety. Light-weight rotors cause less wear and tear on the motor and allow for faster acceleration and braking times.

- Eppendorf QuickLock® lids for ergonomic lid locking**
Our aerosol-tight QuickLock rotors close with only ¼ of a turn. This not only saves you time during every day use, it also takes repetitive stress off your wrist.
- Superior temperature control**
Aluminium, with its high heat conductivity, allows fast pre-cooling and accurate temperature control in refrigerated centrifuges.
- Product features**
- > All rotors are anodized for high chemical resistance and to prevent corrosion
 - > Optimized design of rotor boreholes and adapters provide optimal support for high-speed centrifugation of tubes
 - > Aluminium rotors are recyclable

Rotor 4 x 750 mL (S-4-104)



Features

- > High capacity swing-bucket rotor with max. speed 3,214 x g (3,900 rpm)
- > Broad range of adapters enables high versatility for tubes and bottles from 0.2 mL to 750 mL and plates
- > Aerodynamic round bucket design for up to 36 % energy savings compared to Rotor A-4-81
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps² for safe centrifugation of hazardous samples optionally available
- > Buckets, lids and adapters are autoclavable
- > Rotor life time: max. 100,000 cycles

Tube Volume	reaction vessels 1.5/2.0 mL	12 mm x 75 mm, 5 mL FACS	round-bottom tubes 2.6 – 8 mL	round-bottom tubes 5.5 – 12 mL	round-bottom tubes 9 mL	14 mL
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm
Max. vessel height	39 mm	111 mm	115 mm	119 mm (130 mm in 2 inner rows)	111 mm (130 mm in 2 inner rows)	117 mm
Max. vessel height for use with cap/lid ¹⁾	39 mm	100 mm	108 mm	114 mm	106 mm	112 mm
Adapter						
Number of vessels per adapter/rotor	50/200	27/108	23/92	20/80	20/80	14/56
Bottom shape	flat	round	round	round	round	round
Centrifugation radius	188 mm	175 mm	179 mm	180 mm	179 mm	185 mm
Max. RCF	3,197 x g	2,976 x g	3,044 x g	3,061 x g	3,044 x g	3,146 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5825740009	5825747003	5825738004	5825736001	5825743008	5825748000
List USD	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke. ²⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK. ³⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer. ⁴⁾ Available as a set of 2 bottles (see ordering information). ⁵⁾ Please note that rotor S-4-104 can be used for 120 V models starting with serial numbers: 5810 (≥62.206), 5810 R (≥66.386). If you own a unit with an older serial number please contact Eppendorf Customer Support at 800-645-3050 to learn about your options. ⁶⁾ Software upgrade package for 120 V centrifuges with serial numbers between: 5810 = 12,949–62,206, 5810 R = 37,842–66,386. Package includes rotor 5820740000, an on-site software upgrade for one 58xx centrifuge by an Eppendorf service technician plus free preventive maintenance inspection. Price includes software, travel and labor. ⁷⁾ The following 250 mL conical bottle will fit in the rotor: Nunc 376814.

Ordering information

Description	Catalog No.	List USD
Rotor S-4-104⁵		
incl. 4 x 750 mL round buckets	5820740000	\$3,660.00
incl. 4 plate buckets (aerosol-tight, capable)	5820754001	3,660.00
without buckets	5820755008	1,990.00
with software upgrade package ⁶	022639905	4,480.00
Plate bucket (aerosol-tight capable) , for Rotor S-4-104, incl. plate carrier, set of 2 pcs.	022638930	956.00
Plate bucket (aerosol-tight capable) , for Rotor S-4-104, incl. plate carrier, set of 4 pcs.	022638935	1,850.00
Spare plate carrier	5820756004	302.00
Round bucket 750 mL , for Rotor S-4-104, set of 2 pcs.	5820742003	956.00
Round bucket 750 mL , for Rotor S-4-104, set of 4 pcs.	5820741007	1,850.00
Aerosol-tight caps for plate buckets (aerosol-tight capable) , for Rotor S-4-104 and Rotor S-4x750, set of 2 pieces	022638937	293.00
Aerosol-tight caps for 750 mL round buckets , for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pieces	5820747005	260.00
Wide-neck bottle , 750 mL, set of 2 pieces	5820708000	282.00

Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	30 mL	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 250 mL conical ^{3,7)}	500 mL Corning®	Eppendorf bottle 750 mL ⁴⁾	MTP, DWP, PCR plates
17 mm	25 mm	31 mm	31 mm	62 mm	98 mm	104 mm	–
125 mm	111 mm	122 mm	120 mm	145 mm	150 mm	150 mm	60 mm
120 mm	106 mm	116 mm	116 mm	125 mm	–	–	45 mm
14/56	8/32	7/28	5/20	1/4	1/4	1/4	4/16 (MTP) 1/4 (DWP)
conical	flat	conical	flat	flat	conical	flat	flat
188 mm	174 mm	187 mm	178 mm	183 mm	187 mm	185 mm	151 mm
3,197 x g	2,959 x g	3,180 x g	3,027 x g	3,112 x g	3,146 x g	3,146 x g	2,568 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5825734009	5825755006	5825733002	5825732006	5825741005	5825745000	5825744004	022638930
\$302.00	Inquire	\$302.00	\$302.00	\$302.00	\$302.00	\$186.00	\$956.00



Rotor 4 x 500 mL (A-4-81)



Features

- > Swing-bucket rotor with max. speed 3,220 x g (4,000 rpm)²⁾
- > Rotor A-4-81 accommodates tubes and bottles from 0.2 mL to 500 mL as well as plates
- > Aerosol-tight caps for safe centrifugation of hazardous samples optionally available
- > Mixed loading with 2 plate buckets and 2 rectangular tube buckets allows for increased versatility
- > Buckets, caps and adapters are autoclavable
- > Rotor life time: max. 100,000 cycles

Tube volume	reaction vessels 1.5/2.0 mL	round-bottom tubes 1.2 – 5 mL	round-bottom tubes 2.6 – 5 mL	round-bottom tubes 2.6 – 7 mL	round-bottom tubes 3 – 15 mL	round-bottom tubes 7–17 mL
Max. tube diameter	11 mm	11 mm	13 mm	13 mm	16 mm	17.5 mm
Max. vessel height	43 mm	118 mm	118 mm	118 mm (130 mm in 2 inner rows)	118 mm (130 mm in 2 inner rows)	118 mm
Max. vessel height for use with cap/lid ¹⁾	43 mm	108 mm	107 mm	108 mm (130 mm in 2 inner rows)	108 mm (130 mm in 2 inner rows)	118 mm
Adapter						
Number of vessels per adapter/rotor	20/80	20/80	25/100	18/72	16/64	16/64
Bottom shape	flat	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
Centrifugation radius	165 mm	168 mm	168 mm	168 mm	168 mm	168 mm
Max. RCF	2,950 x g	3,000 x g	3,000 x g	3,000 x g	3,000 x g	3,000 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	022638704	022638707	022638700	022638718	022638721	022638726
List USD	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00

¹⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK. ²⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke. ³⁾ Only Centriprep® tube without locking lid. ⁴⁾ Please note that these conical flasks need to be used together with a conical form insert provided by the flask manufacturer. ⁵⁾ Available as a set of 2 flasks (see ordering information). ⁶⁾ Aerosol-tight caps can be used for BD Falcon® 225 mL and Nunc® 200 mL conical tubes if rubber mat, base plate and clamp are removed from the adapter. Remove rubber mat for aerosol-tight centrifugation of Nalgene® 175 mL conical tube. ⁷⁾ Insert 022654373 recommended for use with 50 mL conical-skirted tubes. Set of 8. ⁸⁾ Set of 4. ⁹⁾ Please note that rotor A-4-81 can be used for 120 V models starting with serial numbers: 5810 (≥2186), 5810 R (≥6203). If you own a unit with an older serial number please contact Eppendorf Customer Support at 800-645-3050 to learn about your options. ¹⁰⁾ The following 250 mL conical bottle will fit in the rotor: Nunc 376814.



Ordering information

Description	Catalog No.	List USD
Rotor A-4-81⁹⁾		
incl. 4 x 500 mL rectangular bucket	022638602	\$3,230.00
incl. 7 x 50 mL conical buckets	022638607	3,230.00
incl. 4 MTP/Flex buckets	022638807	3,790.00
without buckets	022638611	1,760.00
Bucket for 7 x 50 mL conical tubes , for Rotor A-4-81, set of 4	022638614	1,460.00
MTP/Flex bucket , for Rotor A-4-81, set of 2	022638866	1,000.00
MTP/Flex bucket , for Rotor A-4-81, set of 4	022638840	2,000.00
Bucket 500 mL rectangular , for Rotor A-4-81, set of 4	022638629	1,460.00
Aerosol-tight cap for 500 mL rectangular buckets , for Rotor A-4-81, set of 2 pieces	022638661	260.00
500 mL bottle , wide-neck, for Rotor A-4-81, square, set of 2 pieces	022638657	282.00
400 mL bottle , wide-neck, for Rotor A-4-81, set of 2 pieces	022638653	282.00

Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	50 mL conical	50 mL conical	conical tubes, skirted ^{7)/} Centriprep ³⁾ Centrifugal Filter Units 50 mL	180 – 250 mL flat/175 – 250 mL conical ^{4),10)}	400 mL ⁵⁾	500 mL ⁵⁾	MTP, DWP
17.5 mm 121 mm	31 mm 122 mm	31 mm 122 mm	31/29 mm 121 mm	62 mm 133 mm	81 mm –	83 mm 135 mm	– 60 mm
119 mm	116 mm	–	116 mm	130 mm ⁶⁾	–	135 mm	–
12/48	5/20	7/28	5/20	1/4	1/4	-/4	4/16 (MTP) 1/4 (DWP)
conical	conical	conical	flat with rubber mat	flat with rubber mat	flat, rubber	flat	flat with rubber mat
173 mm 3,100 x g set of 2 pcs. 022638742 \$302.00	173 mm 3,100 x g set of 2 pcs. 022638769 \$302.00	180 mm 3,220 x g set of 4 pcs. 022638614 ⁸⁾ \$1,460.00	173 mm 3,100 x g set of 2 pcs. 022638904 \$302.00	173 mm 3,100 x g set of 2 pcs. 022638921 \$302.00	180 mm 3,220 x g set of 2 pcs. 022638785 \$302.00	180 mm 3,220 x g – 022638866 –	163 mm 2,900 x g set of 2 pcs. 022638866 \$1,000.00



Rotor 4 x 250 mL (A-4-62)



Features

- > Swing-bucket rotor with max. speed 3,220 x g (4,000 rpm)¹⁾
- > Rotor A-4-62 accommodates tubes and bottles from 0.2 mL to 250 mL as well as plates
- > Aerosol-tight caps¹⁾ for safe centrifugation of hazardous samples optionally available
- > Rotor, buckets, caps and adapters are autoclavable
- > Rotor lifetime: max. 40,000 cycles

Tube volume	reaction vessels 1.5–2.0 mL	round-bottom tubes 1.2–5 mL	round-bottom tubes 2.6–7 mL	round-bottom tubes 3–15 mL	round-bottom tubes 7–17 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical tubes
Max. tube diameter	11 mm	11 mm	13 mm	16 mm	17.5 mm	17.5 mm
Max. vessel height	43 mm	123 mm	121 mm	121 mm (130 mm in 2 inner rows)	118 mm (130 mm in 2 inner rows)	127 mm
Max. vessel height for use with cap/lid ¹⁾	43 mm	115 mm	118 mm	116 mm (130 mm in 2 inner rows)	114 mm (130 mm in 2 inner rows)	121 mm
Adapter						
Number of vessels per adapter/rotor	16/64	25/100	15/60	12/48	12/48	9/36
Bottom shape	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical
Centrifugation radius	171 mm	173 mm	173 mm	173 mm	173 mm	178 mm
Max. RCF	3,000 x g	3,050 x g	3,050 x g	3,050 x g	3,050 x g	3,150 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	022638220	022638203	022638246	022638262	022638301	022638289
List USD	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke. ²⁾ Aerosol-tightness tested by the Centre for Health Protection Agency, Porton Down, UK. ³⁾ For high g-forces we recommend using centrifuge tubes of Duran® glass. ⁴⁾ Please note that these conical flasks need to be used together with a conical form insert provided by the manufacturer. ⁵⁾ Aerosol-tight caps can be used for BD Falcon® 225 mL and Nunc® 200 mL conical tubes if rubber mat is removed from the adapter. Aerosol-tight centrifugation is not possible with Nalgene® 175 mL conical tube due to the size of the tube lid. ⁶⁾ Insert 022654373 recommended for use with 50 mL conical-skirted tubes. Set of 8. ⁷⁾ Form inserts for 50 mL conical tubes included in delivery. Reorder Catalog No. 022637479. Set of 8. ⁸⁾ Set of 4. ⁹⁾ The following 250 mL conical bottle will fit in the rotor: Nunc 376814.

i For more information go to www.eppendorf.com/centrifugation



Ordering information

Description	Catalog No.	List USD
Rotor A-4-62		
incl. 4 x 250 mL rectangular buckets	022638009	\$2,290.00
incl. 4 MTP buckets	022638041	2,750.00
Rectangular bucket 250 mL , for Rotor A-4-62, 4 pieces	022638084	1,510.00
MTP bucket , for Rotor A-4-62-MTP, for 4 MTP or 1 DWP, set of 4	022638068	1,420.00
Aerosol-tight cap , for rectangular bucket 250 mL, 2 pieces	022638033	169.00
Spare rubber mat , for 250 mL bucket adapter, set of 4	022638483	23.50
Spare adapter clamp , for 250 mL bucket adapter, set of 2	022638467	23.50
Spare rubber base mat , for MTP bucket, set of 2	022638106	64.80

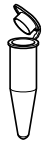
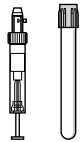
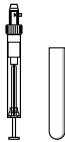
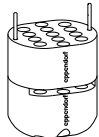
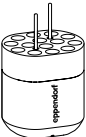
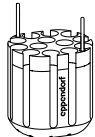
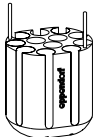
round-bottom tubes 7–18 mL	round-bottom tubes 18–30 mL	30 – 50 mL round-bottom/ 50 mL conical, skirted ²⁾	50 mL conical	50 mL conical	50–75 mL	80– 120 mL	180 – 250 mL flat/ conical ^{4,9)}	MTP, DWP, PCR plates
20 mm	26 mm	31 mm	31 mm	31 mm	35 mm	45 mm	62 mm	
126 mm	119 mm	115 mm	122 mm	122 mm	122 mm	138 mm	136 mm	53 mm
119 mm	116 mm	113 mm		116 mm	118 mm	125 mm	127 mm ⁵⁾	
8/32	4/16	4/16 ⁶⁾	4/16 ⁷⁾	3/12	2/8	1/4	1/4	4/16 (MTP) 1/4 (DWP)
flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with conical inlay	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat
173 mm	173 mm	173 mm	173 mm	178 mm	173 mm	173 mm	180 mm	154 mm
3,050 x g	3,050 x g	3,050 x g	3,050 x g	3,150 x g	3,050 x g	3,050 x g	3,220 x g	2,750 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 4 pcs.
022638327	022638360	022638386	022638351	022638343	022638408	022638424	022638441	022638068
\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$1,420.00



Rotor 4 x 250 mL (S-4-72)



- Features**
- > Medium capacity swing-bucket rotor with speed up to 3,234 x g (4,200 rpm)¹⁾
 - > Broad range of adapters available to handle all common tube formats from 0.2 mL to 250 mL
 - > Aerodynamic round bucket design for up to 48 % energy savings compared to Rotor A-4-62
 - > Buckets and adapters are autoclavable
 - > Rotor lifetime: max. 60,000 cycles

				
Tube Volume	tubes 1.5/2.0 mL	round-bottom tubes 2.6–8 mL	round-bottom tubes 5.5–12 mL	round-bottom tubes 9 mL
Max. tube diameter	11 mm	13 mm	16 mm	17.5 mm
Max. vessel height	43 mm	115 mm	112 mm	113 mm
Adapter				
Number of vessels per adapter/rotor	26/104	14/56	13/52	12/48
Bottom shape	flat	round	round	round
Centrifugation radius	159 mm	159 mm	157 mm	158 mm
Max. RCF	3,136 x g	3,136 x g	3,096 x g	3,116 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5804794001	5804789008	5804791002	5804792009
List USD	\$282.00	\$282.00	\$282.00	\$282.00

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. ²⁾ Please note that these conical flasks need to be used together with a conical form insert provided by the flask manufacturer. ³⁾ Please note that rotor S-4-72 can be used for 120 V models starting with serial numbers: 5804 (≥62.247), 5804 R (≥63.063), 5810 (≥62.206), 5810 R (≥66.386). If you own a unit with an older serial numbers please contact Eppendorf Customer Support at 800-645-3050 to learn about your options. ⁴⁾ Software upgrade package for 120 V centrifuges with serial numbers between: 5804 = 13,031–62,247, 5804 R = 33,350–63,063, 5810 = 12,949–62,206, 5810 R = 37,842–66,386. Package includes rotor 5804746007, an on-site software upgrade for one 58xx centrifuge by an Eppendorf service technician plus free preventive maintenance inspection. Price includes software, travel and labor.

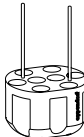
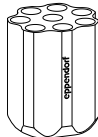
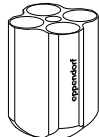
i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.



Ordering information

Description	Catalog No.	List USD
Rotor S-4-72 ³⁾ , incl. 4 x 250 mL round buckets	5804746007	\$2,290.00
Rotor S-4-72, with software upgrade package ⁴⁾	022639907	3,110.00

				
Eppendorf Tubes® 5.0 mL	15 mL conical	50 mL conical	50 mL conical, skirted	250 mL flat/ 175 – 225 mL conical ²⁾
17 mm	17 mm	31 mm	31 mm	62 mm
60 mm	120 mm	120 mm	120 mm	130 mm
				
8/32	8/32	4/16	2/8	1/4
conical	conical	conical	flat	flat
163 mm	164 mm	164 mm	153 mm	160 mm
3,215 x g	3,234 x g	3,234 x g	3,017 x g	3,175 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5804793005	5804783000	5804784006	5804785002	5804787005
\$282.00	\$282.00	\$282.00	\$282.00	\$282.00



Rotor 4 x 100 mL (A-4-44)



- Features**
- > High-speed swing-bucket rotor for applications up to 4,500 x g (5,000 rpm)¹⁾
 - > Rotor A-4-44 accommodates tubes from 0.2 mL to 100 mL
 - > Aerosol-tight caps²⁾ for safe centrifugation of hazardous samples optionally available
 - > Rotor, buckets, caps and adapters are autoclavable
 - > Rotor lifetime: max. 34,000 cycles

Tube volume	reaction vessels 1.5–2.0 mL	round-bottom tubes 1.2–5 mL	round-bottom tubes 2.6–7 mL	round-bottom tubes 3–15 mL	round-bottom tubes 7–17 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	15 mL conical
Max. tube diameter	11 mm	11 mm	13 mm	16 mm	17.5 mm	17.5 mm	17.5 mm
Max. vessel height	43 mm	105 mm	108 mm	108 mm	110 mm	121 mm	121 mm
Max. vessel height for use with cap/lid ¹⁾	43 mm	102 mm	106 mm	106 mm	106 mm		121 mm
Adapter							
Number of vessels per adapter/rotor	12/48	14/56	9/36	7/28	6/24	4/16	2/8
Bottom shape	flat	flat with rubber mat	flat with rubber mat	flat with rubber mat	flat with rubber mat	conical	conical
Centrifugation radius	148 mm	150 mm	150 mm	150 mm	150 mm	155 mm	157 mm
Max. RCF	4,100 x g	4,200 x g	4,200 x g	4,200 x g	4,200 x g	4,300 x g	4,400 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	022637525	022637509	022637541	022637568	022637584	022637606	022637614
List USD	\$251.00	\$251.00	\$251.00	\$251.00	\$251.00	\$251.00	\$251.00

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke. ²⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK. ³⁾ For high g-forces we recommend using centrifuge tubes of Duran® glass. ⁴⁾ Max. load per bucket: 140 grams. ⁵⁾ Reordering of 50 mL form inserts: 022637479. Set of 8. ⁶⁾ Form inserts for 50 mL conical tubes included in delivery. Reorder Catalog No. 022637479. Set of 8.

i For more information go to www.eppendorf.com/centrifugation

Ordering information

Description	Catalog No.	List USD
Rotor A-4-44		
incl. 4 rectangular buckets 100 mL	022637401	\$1,670.00
incl. 4 buckets for 2 x 50 mL conical tubes	022637461	2,360.00
Bucket for 2 x 50 mL conical tubes , for Rotor A-4-44, set of 4	022637452	1,100.00
Rectangular bucket 100 mL , for Rotor A-4-44, set of 4	022637436	1,320.00
Aerosol-tight cap , for rectangular bucket 100 mL, 2 pieces	022637428	144.00
Insert , for 1 conical tube 50 mL, set of 8 pieces	022637479	77.00
Spare rubber mat , for 100 mL bucket adapter, set of 4	022662503	23.50
Spare adapter clamp , for 100 mL bucket adapter, set of 2	022662511	23.50

round-bottom tubes 7–18 mL	round-bottom tubes 18–30 mL	50 mL ²⁾ conical	50 mL conical	50 mL conical	30 – 50 mL round-bottom/ 50 mL conical, skirted ³⁾	50 – 75 mL	80 – 100 mL
20 mm	26 mm		31 mm	31 mm	31 mm	35 mm	45 mm
107 mm	110 mm	120 mm	122 mm	122 mm	122 mm	119 mm	114 mm
104 mm	100 mm			119 mm	108 mm	108 mm	100 mm
4/16	2/8	–/8 ⁴⁾	1/4	1/4	1/4 ⁵⁾	1/4	1/4
flat with rubber mat	flat with rubber mat	flat with conical inlay	conical	conical	flat with rubber mat	flat with rubber mat	flat with rubber mat
150 mm	150 mm	161 mm	155 mm	157 mm	150 mm	150 mm	150 mm
4,200 x g	4,200 x g	4,500 x g	4,300 x g	4,400 x g	4,200 x g	4,200 x g	4,200 x g
set of 2 pcs.	set of 2 pcs.	set of 4 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
022637622	022637649	022637452	022637665	022637673	022637681	022637703	022637720
\$251.00	\$251.00	\$1,100.00	\$251.00	\$251.00	\$251.00	\$251.00	\$251.00

Rotors for plates (A-2-DWP-AT and A-2-DWP)



Rotor A-2-DWP-AT

- > For use in Centrifuge 5810/5810 R only³
- > Max. speed: 3,486 × g (4,500 rpm)
- > Rotor can handle up to
 - 2 × 6 MTP
 - 2 × 2 DWP
 - 2 × 1 Filtration plate kits
- > Maximum loading height of 67 mm (89 mm without lid)
- > Rotor comes with aerosol-tight caps² for safe centrifugation of hazardous samples
- > Rotor and buckets are autoclavable
- > Rotor lifetime: max. 100,000 cycles

Ordering information

Description	Catalog No.	List USD
Rotor A-2-DWP-AT, incl. 2 buckets, 2 aerosol-tight caps and 2 plate carriers	5820710004	\$2,770.00
Rotor A-2-DWP-AT, with software upgrade package ⁴	022639901	3,590.00
Aerosol-tight lids for rotor A-2-DWP-AT, set of 2	5820713003	321.00
Plate carrier, set of 2	5820712007	279.00
Spare buckets for A-2-DWP-AT, set of 2	5820711000	1,340.00
Spare seals, for aerosol-tight plate rotor lids, set of 2	5820705000	69.90



Rotor A-2-DWP

- > For use in Centrifuge 5804/5804 R and 5810/5810 R¹⁾
- > Max. speed: 2,250 × g (3,700 rpm)³⁾
- > Rotor can handle up to
 - 2 × 5 MTP
 - 2 × 4 Cell culture plates
 - 2 × 2 DWP
 - 2 × 1 Filtration plate kits
- > Maximum loading height of 89 mm
- > Rotor and buckets are autoclavable
- > Rotor lifetime: max. 34,000 cycles

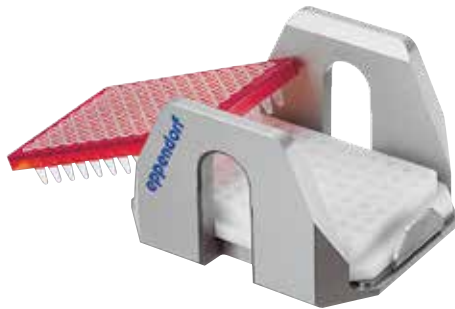
Ordering information

Description	Catalog No.	List USD
Rotor A-2-DWP, deepwell plate rotor incl. 2 buckets	022638564	\$2,070.00
Spare buckets for A-2-DWP, set of 2	022638556	760.00
Spare rubber base plate for A-2-DWP buckets, set of 2	022638599	66.20

¹⁾ Rotor A-2-DWP can be used for all 120 V models starting with the following serial numbers: 5804 (≥1410), 5804R (≥1820), 5810 (≥990), 5810R (≥2949). If you own a unit with an older serial numbers please contact Eppendorf Customer Support at 800-645-3050 to learn about your options. ²⁾ Aerosol-tightness tested by the Centre for Applied Microbiology and Research, CAMR, Porton Down, Great Britain. ³⁾ A software upgrade may be necessary for model between serial numbers 10,000 (5804/5804 R/5810) / 12,000 (5810 R) and 60,000. Please contact your local Eppendorf representative or Eppendorf Customer Support at 800-645-3050 for more information. ⁴⁾ Software upgrade package includes an on-site software upgrade for one 58xx centrifuge by an Eppendorf service technician plus free preventive maintenance inspection. Price includes software, travel and labor.

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.



PCR adapter

- > PCR plate adapters are designed to support thin-walled PCR plate wells during centrifugation
- > Available for 96-well and 384-well PCR plates
- > Adapters can be used in all Eppendorf plate rotors

Ordering information

Description	Catalog No.	List USD
Adapter, for 1 PCR plate (96 wells), for plate rotors, set of 2 pcs.	022638947	\$185.00
Adapter, for 1 PCR plate (384 wells), for plate rotors, set of 2 pcs.	022638955	185.00



Cell culture flask adapter

- > Adapter to spin down cell cultures directly in a cell culture flask
- > Suitable for 25 cm² and selective 75 cm² flasks¹⁾ (please ask for details)
- > Adapters can be used in Eppendorf plate rotor A-4-81-MTP/Flex

Ordering information

Description	Catalog No.	List USD
Adapter, for 1 cell culture flask, for Rotors A-4-81-MTP/Flex	022638972	\$185.00



IsoRack adapter

- > IsoRack adapters to support 0.5 mL and 1.5/2 mL IsoRacks during centrifugation
- > Adapters can be used in Eppendorf plate rotors A-2-DWP and A-4-81-MTP/Flex

Ordering information

Description	Catalog No.	List USD
CombiSlide Adapter, for 12 slides, for plate rotors, set of 2 pcs.	022638963	\$267.00
Adapter, for 24 vessels in the IsoRack 0.5 mL, for Rotors S-4-104, A-4-81-MTP/Flex, A-2-DWP, set of 2 pcs.	022638980	185.00
Adapter, for 24 vessels in the IsoRack 1.5/2.0 mL, for Rotors S-4-104, A-4-81-MTP/Flex, A-2-DWP, set of 2 pcs.	022638998	185.00

¹⁾ Suitable for the following 75 cm² flasks: Nunc® (e.g., Catalog Nos. 156472, 156499), Greiner (e.g., Catalog Nos. 658170, 658175, 658190, 658195), Sarstedt (Catalog Nos. 83.1811 and 83.1811.002). Please perform a manual swing-out test before centrifugation.

Rotor 6 x 100 mL (F-34-6-38)



Features

- > High-speed rotor for molecular applications in tubes from 0.2 mL to 85 mL¹⁾
- > Max. speed: 18,500 x g (12,000 rpm) in Centrifuge 5810 R or 15,500 x g (11,000 rpm) in 5804/5804 R/5810
- > Low rotor weight (3.2 kg) for easy handling
- > 34 ° borehole angle reduces pellet smears along tube wall
- > Anodized aluminum for high chemical resistance
- > Rotor, lid and adapters are autoclavable
- > Rotor lifetime: max. 75,000 cycles

Tube volume	reaction vessels 1.5–2.0 mL	round-bottom tubes 2.6–7 mL	round-bottom tubes 2.6–7 mL	round-bottom tubes 7–15 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	11 mm	13 mm	13 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	110 mm	90 mm	110 mm	112 mm	104 mm
Adapter					
Number of vessels per adapter/rotor	4/24	3/18	3/18	2/12	1/6
Bottom shape	round	flat	flat	round	conical
Centrifugation radius	113 mm	106 mm	114 mm	112 mm	105 mm
Max. RCF at 12,100 rpm (5810 R)	18,200 x g	17,065 x g	18,353 x g	18,000 x g	16,824 x g
Max. RCF at 11,000 rpm (5804, 5804 R, 5810)	15,300 x g	14,339 x g	15,422 x g	15,150 x g	14,150 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	022637215	022637279	022637282	022637223	5804777000
List USD	\$166.00	\$166.00	\$166.00	\$166.00	\$162.00

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.

Ordering information

Description	Catalog No.	List USD
Rotor F-34-6-38, for 6 x 85 mL tubes, incl. rotor lid	022637207	\$2,500.00

15 mL conical	15 – 18 mL	20 – 30 mL	50 mL	50 mL conical	85 mL
17 mm	18 mm	26 mm	29 mm	31 mm	38 mm
123 mm	123 mm	123 mm	123 mm	121 mm	121 mm
1/6	1/6	1/6	1/6	1/6	-/6
conical	round	round	round	conical	round
107 mm	109 mm	110 mm	112 mm	108 mm	115 mm
17,200 x g	17,550 x g	17,700 x g	18,000 x g	17,400 x g	18,500 x g
14,450 x g	14,750 x g	14,900 x g	15,150 x g	14,600 x g	15,500 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
022637274	022637231	022637240	022637258	022637266	–
\$166.00	\$166.00	\$166.00	\$166.00	\$166.00	–



Rotor 6 x 50 mL conical (FA-45-6-30)



Features

- > High-speed rotor for applications in tubes from 5 – 50 mL
- > Max. speed 20,130 × g (12,100 rpm) in Centrifuge 5810 R or 16,639 × g (11,000 rpm) in 5804/5804 R/5810²
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight¹ for safe centrifugation of hazardous samples
- > Low rotor weight (3.2 kg) for easy lifting
- > Anodized aluminum for high chemical resistance
- > 45 ° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable
- > Rotor lifetime: max. 100,000 cycles

Tube Volume	round-bottom tube 2.6–5 mL	round-bottom tube 4–8 mL	round-bottom tube 5.5–10 mL	round-bottom tube 7.5–12 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	13 mm	13 mm	16 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	119 mm	119 mm	119 mm	119 mm	121 mm
Adapter					
Number of vessels per adapter/rotor	1/6	1/6	1/6	1/6	1/6
Bottom shape	round	round	round	round	conical
Centrifugation radius	120 mm	120 mm	120 mm	120 mm	121 mm
Max. RCF at 12.100 rpm (5810 R)	19,246 x g	19,246 x g	19,246 x g	19,246 x g	19,806 x g
Max. RCF at 11.000 rpm (5804, 5804 R, 5810)	16,233 x g	16,233 x g	16,233 x g	16,233 x g	16,369 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5820726008	5820725001	5820728000	5820727004	5820730005
List USD	\$166.00	\$166.00	\$166.00	\$166.00	\$162.00

¹) Aerosol-tightness tested by Health Protection Agency, Porton Down, UK. ²) Max. speed in Centrifuge 5810 R, lower speed applies to Centrifuge 5804/5804 R/5810. ³) Please note that rotor FA-45-6-30 can be used for 120 V models with serial numbers above 60,000. If you own a unit with an older serial numbers please contact Eppendorf Customer Support at 800-645-3050 to learn about your options. ⁴) Software upgrade package for 120 V centrifuges with serial numbers between 10,000 (5804/5804 R/5810) / 12,000 (5810 R) and 60,000. Package includes rotor 5820715006, an on-site software upgrade for one 58xx centrifuge by an Eppendorf service technician plus free preventive maintenance inspection. Price includes software, travel and labor.



Ordering information

Description	Catalog No.	List USD
Rotor FA-45-6-30 ³⁾ , incl. rotor lid, for 6 x 15/ 50 mL conical tubes	5820715006	\$2,600.00
Rotor FA-45-6-30, with software upgrade package ⁴⁾	022639903	3,370.00
Rotor lid, for rotor FA-45-6-30	5820716002	279.00
Spare seals for rotor lid, pack of 5	022652109	145.00

round-bottom tube 7–17 mL	conical tube 15 mL	round-bottom tube 15–18 mL	round-bottom tube 20–30 mL	tube 35 mL	50 mL conical
17.5 mm	17 mm	18 mm	26 mm	29 mm	31 mm
122 mm	125 mm	125 mm	125 mm	125 mm	121 mm
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
19,246 x g	19,246 x g	19,246 x g	17,187 x g	18,333 x g	20,130 x g
16,233 x g	16,223 x g	16,223 x g	14,204 x g	16,161 x g	16,639 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	–
5820729007	5820717009	5820720000	5820721006	5820722002	–
\$166.00	\$166.00	\$166.00	\$166.00	\$166.00	



Rotors for 58xx Family



30 x 1.5/2.0 mL (FA-45-30-11 and F-45-30-11)

- > 30 places for 1.5/2.0 mL tubes
- > Max. speed: 20,800 × g (max. 14,000 rpm)
- > Rotor FA-45-30-11 comes with aerosol-tight*1 lid for safe centrifugation of hazardous samples
- > Rotors, lids and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminum for high chemical resistance
- > Rotor lifetime: unlimited cycles

*1 Aerosol-tightness has been tested by Public Health England, Porton Down, Great Britain.

Ordering information

Description	Catalog No.	List USD
30 x 1.5/2.0 mL rotor, including lid	022637002	\$1,170.00
30 x 1.5/2.0 mL rotor, including aerosol-tight lid	022637100	1,590.00



48 x 1.5/2.0 mL (FA-45-48-11)

- > 48 places for 1.5/2.0 mL tubes
- > Max. speed: 19,083 × g (max. 13,000 rpm)
- > Eppendorf QuickLock® rotor lid for fast lid locking
- > Aerosol-tight for safe centrifugation of hazardous samples *2
- > Anodized aluminum for high chemical resistance
- > Rotor and lid are autoclavable
- > Rotor lifetime: 100,000 cycles

*1 Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

*2 Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Catalog No.	List USD
48 x1.5/2.0 mL rotor, incl aerosol-tight QuickLock lid ¹⁾	5820760001	\$1,740.00
48 x 1.5/2.0 mL rotor, with software upgrade package ²⁾	022639911	2,550.00



20 x 5.0 mL (FA-45-20-17)

- > 20 places for Eppendorf Tube 5.0 mL
- > Max. speed: 20,913 × g (13,100 rpm)
- > Aerosol-tight Eppendorf QuickLock rotor lid²⁾
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminium for high chemical resistance
- > Rotor lifetime: 100,000 cycles

¹⁾ Please note that a software upgrade will be necessary for older centrifuges when using this rotor. Please contact your local Eppendorf organization or dealer for further information.

²⁾ Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Catalog No.	List USD
20 x 5.0 mL rotor, including aerosol-tight QuickLock lid ¹⁾	5820765003	\$1,740.00
Adapter, for 1 Vessel 1.5–2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820768002	43.10
Adapter, for 1 Cryotube, for all 5.0 mL rotors, set of 4 pcs.	5820769009	43.10
Adapter, for 1 tube 5 mL, for all 5.0 mL rotors, set of 4 pcs.	5820770007	43.10
Rotor FA-45-20-17, with software upgrade package ²⁾	022639913	2,550.00



48 x 15 mL (F-35-48-17)

- > High-capacity fixed-angle rotor for 15 mL conical and glass tubes
- > Maximum speed: 5,005 × g (5,500 rpm)
- > Form inserts for 15 mL conical tubes
- > Also accommodates 16 x 125 glass tubes
- > Rotor lifetime: 100,000 cycles

Ordering information

Description	Catalog No.	List USD
48 x 15 mL rotor, for 24 × 15 mL conical tubes, incl. 24 steel sleeves and adapters ¹⁾	5820771003	\$ 940.00
48 x 15 mL rotor, for 40 × 15 mL conical tubes, incl. 48 steel sleeves and adapters ¹⁾	5820772000	1,500.00
48 x 15 mL rotor, with software upgrade package ²⁾	022639909	1,850.00

¹⁾ Please note that rotors FA-45-48-11, FA-45-20-17, and F-35-48-17 can be used for 120 V models starting with serial numbers: 5804 (≥62.247), 5804 R (≥63.063), 5810 (≥62.206), 5810 R (≥66.386). If you own a unit with an older serial numbers please contact Eppendorf Customer Support at 800-645-3050 to learn about your options. ²⁾ Software upgrade package for 120 V centrifuges with serial numbers between: 5804 = 13,031–62,247, 5804 R = 33,350–63,063, 5810 = 12,949–62,206, 5810 R = 37,842–66,386. Package includes rotor, an on-site software upgrade for one 58xx centrifuge by an Eppendorf service technician plus free preventive maintenance inspection. Price includes software, travel and labor.





Rotors for 58xx Family



60 x 1.5/2.0 mL (T-60-11)

- > High capacity for 60 × 1.5/2.0 mL tubes
- > Max. speed: 16,400 × g (14,000 rpm)
- > Horizontal centrifugation for pellet formation at tube bottom – ideal for low sample quantities
- > Rotor lifetime: unlimited cycles

Ordering information

Description	Catalog No.	List USD
Rotor T-60-11, incl. rotor lid, for 1.5/2.0 mL tubes, without adapter	022638505	\$2,780.00
Adapter, for 10 reaction vessels 1.5/2.0 mL, for Rotor T-60-11, set of 6 pcs.	022638521	490.00
Adapter, for 20 reaction vessels 0.4 mL, for Rotor T-60-11, set of 6 pcs.	022638548	490.00



6 x 5/8 tube strip or 48 x 0.2 mL (F-45-48-PCR)

- > Max. RCF: 15,350 × g (12,000 rpm)
- > Accommodates up to 6 × 8-tube PCR strips, 6 × 5-tube PCR strips or 48 × 0.2 mL PCR tubes
- > Safe and easy handling without additional lid
- > Rotor lifetime: unlimited cycles

Ordering information

Description	Catalog No.	List USD
48 x 0.2 mL, individual PCR tube rotor	022638581	\$2,070.00

Rotors and accessories for Centrifuges 5804/5804 R and 5810/5810 R

Technical specifications of rotors for Centrifuges 5804/5804 R and 5810/5810 R¹

5804/ 5804 R	5810/ 5810 R	Rotor	Max. capacity	Max. rcf (x g)	Max. (rpm)	Max. radius (cm)	Lowest temp. at max. rpm ²	Rotor weight (kg/lbs) ³	Max. load per bucket/ bore ⁴	Max. loading height for plate buckets	Aerosol- tight contain- ment ⁵
Swing-bucket rotors											
–	■	S-4-104	4 x 750 mL	3,214	3,900	18.9	<4 °C	8.8/19.4	1,000 g	60 mm	■
–	■	A-4-81 ⁶	4 x 500 mL	3,250	4,000	18.0	<4 °C	7.5/16.6	780 g	–	■
–	■	A-4-81-MTP/Flex ⁶	4 x 4 MTP	2,900	4,000	16.3	<0 °C	8.4/18.5	380 g	60 mm	–
–	■	A-4-62 ⁷	4 x 250 mL	3,200	4,000	18.0	≤2 °C	4.9/10.8	630 g	–	■
–	■	A-4-62-MTP ⁷	4 x 3 MTP	2,750	4,000	15.4	<0 °C	5.9/13.1	380 g	53 mm	–
■	■	S-4-72	4 x 250 mL	3,234	4,200	16.4	<4 °C	5/11	450 g	–	–
■	■	A-4-44	4 x 100 mL	4,500	5,000	16.1	≤4 °C	3.0/6.5	310 g	–	■
–	■	A-2-DWP-AT	2 x 6 MTP	3,486	4,500	15.4	<4 °C	7.4/16.3	500 g	89 ⁸ mm	■
■	■	A-2-DWP	2 x 5 MTP	2,250	3,700	14.7	<0 °C	3.1/7.1	380 g	89 mm	–
Fixed-angle rotors											
■	■	F-34-6-38	6 x 100 mL	18,500 (5810 R)	12,000 (5810 R)	11.5	9 °C ⁹	3.2/7.0	125 g	–	–
				15,500	11,000		≤4 °C				
■	■	FA-45-6-30	6 x 50 mL	20,130 (5810 R)	12,100 (5810 R)	12.3	≤10 °C	3.2/7.0	500 g	–	■
				16,640	11,000		4 °C				
■	■	FA-45-20-17	20 x 5.0 mL	20,913	13,100	10.9	<4 °C	3.2/7.0	9.5 g	–	■
■	■	FA-45-48-11	48 x 1.5/2.0 mL	19,083	13,000	10.1	<4 °C	3/6.6	3.75 g	–	■

¹⁾ Additional information for rotors FA-45-30-11, F-45-30-11, F-45-48-PCR, F-35-48-17, and T-60-11 can be found at www.eppendorf.com. ²⁾ Refrigerated centrifuges (230 V or 120 V (20 A)) at 23 °C room temperature, after 1 h run. ³⁾ Weight includes bucket for swing-bucket rotors and rotor lid for fixed-angle rotors. ⁴⁾ Adapter + tubes + contents. ⁵⁾ Aerosol-tightness has been tested and approved in accordance with the procedure of Bennett et al. from the Centre for Applied Microbiology & Research in Porton Down, CAMR, Great Britain, and according to annex AA of the IEC 1010-2-020 safety standard. ⁶⁾ The swing-bucket rotor can be delivered without buckets, equipped with rectangular buckets as an A-4-81 or with MTP/Flex buckets as an A-4-81-MTP/Flex, whereby the MTP/Flex buckets can be purchased separately in sets of 2 or 4. ⁷⁾ The swing-bucket rotor can be delivered as A-4-62 (loaded with buckets) or as A-4-62-MTP (loaded with plate buckets). Max. rpm to maintain 4 °C is 11,000 rpm. ⁸⁾ Without aerosol-tight lid. ⁹⁾ Max. rpm to maintain 4 °C is 11,000 rpm.

Approximate braking times for different rotors at levels 0 to 9 (in seconds) for 230 V¹⁰ centrifuges¹¹

5804/ 5804 R	5810/ 5810 R	Max. volume	Rotor	0	1	2	3	4	5	6	7	8	9
–	■	4 x 750 mL	S-4-104	690	196	173	152	133	114	70	49	38	32
–	■	4 x 500 mL	A-4-81	532	189	174	143	131	109	95	85	59	31
–	■	4 x 4 MTP	A-4-81-MTP/Flex	643	191	174	142	131	110	94	83	58	30
–	■	4 x 250 mL	A-4-62	740	190	170	140	130	110	95	85	55	26
–	■	4 x 3 MTP	A-4-62-MTP	620	190	170	140	130	110	95	85	55	26
■	■	4 x 250 mL	S-4-72	337	242	196	172	152	119	55	32	21	17
■	■	4 x 100 mL	A-4-44	470	300	270	220	200	140	100	75	45	23
■	■	2 x 5 MTP	A-2-DWP	304	174	130	118	100	75	51	44	32	14
–	■	2 x 6 MTP	A-2-DWP-AT	857	231	202	176	157	135	112	102	69	39
■	■	6 x 100 mL	F-34-6-38	880	370	280	190	170	150	125	95	75	54
■	■	6 x 50 mL	FA-45-6-30	759	423	322	231	205	178	148	113	93	58

The given times are to be considered guidelines. While level 9 means “strongest braking,” level 0 means “free deceleration,” whereby considerable fluctuations can occur with this uncontrolled deceleration, depending upon the condition of the device and the load. ¹⁰⁾ Deceleration times for 230 V and 120 V devices are almost identical. ¹¹⁾ Additional braking information for rotors FA-45-30-11, F-45-30-11, F-45-48-PCR, F-35-48-17, and T-60-11 can be found in the operating manual for Centrifuge 5804/5804 R/5810/5810 R

Centrifuge 5920 R



1. Ergonomic lid operation

- > Soft-touch lid closure and low opening height for stress-free lid locking
- > Two open lid positions:
 - Fully open for easy removal of rotor
 - Half open for easy access to samples and easy reach of centrifuge lid

2. Extraordinary high capacity

- > Max. 4 x 1000 mL/108 x 15 mL conical/52 x 50 mL conical/196 x 5/7 mL blood collection/28 x MTP

3. Outstanding cooling performance

- > Dynamic compressor control with ECO shut-off function which ensures your samples stay at the programmed temperature

4. Menu-operated display

- > Multilingual operation menu with language support for English, German, French and Spanish
- > 5 program keys for easy access to routine programs

5. Quiet operation

- > Designed to operate at low noise levels for a relaxing work environment



Watch Centrifuge 5920 R video clip on our optimized webpage for mobile devices or www.eppendorf.com/centrifugation



Description

Centrifuge 5920 R delivers extraordinary high capacity in a very compact and ergonomic product design. It has similar dimensions as competing refrigerated 3 Liter models and yet features a superior capacity of up to 4 x 1000 mL; thus making it the ideal instrument for high-throughput applications. It features a powerful state-of-the-art refrigeration system with advanced temperature management to keep your samples safe.

Product features

- > Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 1000 mL
- > Plate rotor options for centrifugation of all types of MTP, PCR or deepwell plates
- > Fixed-angle rotors for high-speed molecular biology applications in tubes from 0.2 mL to 100 mL
- > High centrifugation speed of up to 25,062 x g (14,000 rpm)
- > Aerosol-tight Eppendorf QuickLock® caps and lids allow fast and ergonomic lid locking
- > Centrifuge lid with soft-touch lid closure
- > Quiet operation to improve your work environment
- > Compact footprint saves valuable space compared to similar capacity floor-standing centrifuges
- > Automatic rotor recognition and imbalance detection for maximum operational safety
- > Rolling cabinet to save valuable bench space available soon (inquire with your local sales rep)

Additional features for Centrifuge 5920 R

- > Temperature range from -11 °C to 40 °C
- > FastTemp function for quick pre-cooling
- > FastTemp pro® function allows for automatic precooling based on pre-programmable time and date
- > Standby cooling function holds temperature when centrifuge is not in use
- > ECO shut-off engages after 8 hours (adjustable) of non-use to reduce energy consumption and to extend compressor life
- > Dynamic compressor control (DCC) technology for optimized cooling performance

i For more information go to www.eppendorf.com/centrifugation

Centrifuge 5920 R



4 Liter capacity

- > Centrifuge 5920 R accommodates standard 1 Liter Nalgene bottles setting a new standard in the table top centrifuge segment.

Advantages:

- > Process higher volumes in fewer runs



High-capacity buckets

- > Exceptionally high capacity for 52 x 50 mL conical tubes and 196 x 13 mm blood collection tubes
- > Accommodate tubes and plates in the same bucket

Advantages:

- > Time saving: No need to exchange buckets
- > Cost saving: No need to buy separate plate buckets
- > Space saving: No need to store different buckets



Advanced operating system

- > Menu-driven, multi lingual operation menu with large backlit display
- > Saves up to 99 user-defined programs
- > 5 program keys for easy access to routine programs
- > Ultra low power consumption in standby (<2 W)
- > FastTemp pro® function for automated pre-cooling based on pre-programmable time and date

Advantages:

- > Intuitive operating system to make lab life easier

i For more information go to www.eppendorf.com/centrifugation

Technical specifications	
Max. RCF	25,062 x g
Max. RCF with fixed-angle rotor	25,062 x g
Max. RCF with swing-bucket rotor	4,816 x g
Speed	200 – 14,000 rpm (10 rpm steps)
Max. capacity	4 x 1000 mL/4 x 7 MTP
Acceleration/braking ramps	10/10
Number of programs	99 (5 program keys)
Timer	30 s to 99 min, with continuous run function, short-spin
Noise level	
Rotor FA-6x50	<60 dB(A)
Rotor S-4x750	<55 dB(A)
Power supply	120 V, 50 – 60 Hz
Max. power consumption	1,440 W
Dimensions (W x D x H)	29 x 28 x 15 in / 74 x 71 x 40 cm
Height (with open lid)	37 in / 94 cm
Weight w/o accessories	306 lb / 139 kg
Cooling	refrigerated
Temperature control range	-11 °C to 40 °C

Centrifuge Packages



Description
Eppendorf provides a range of different centrifuge packages for Centrifuge 5920 R.

- Cell Culture Centrifuge packages include**
- > Centrifuge 5920 R
 - > Swing-bucket rotor incl. one bucket type (see next page)
 - > Four adapters for 15 mL conical tubes (two sets of 2)
 - > Four adapters for 50 mL conical tubes (two sets of 2)

- Centrifuge packages for blood collection tubes include**
- > Centrifuge 5920 R
 - > Swing-bucket rotor incl. one bucket type (see adjacent)
 - > Four adapters for 13 mm (5/7 mL) blood collection tubes (two sets of 2)
 - > Four adapters for 16 mm (10 mL) blood collection tubes (two sets of 2)
 - > Four aerosol-tight caps (two sets of 2)

- Cell harvesting package includes**
- > Centrifuge 5920 R
 - > Swing buckets rotor incl. two bucket types (see next page)
 - > Four adapters for 15 mL conical tubes (two sets of 2)
 - > Four adapters for 50 mL conical tubes (two sets of 2)
 - > Four adapters for 250 mL conical bottles (two sets of 2)
 - > Four adapters for 1000 mL bottles (two sets of 2)
 - > Four plate carriers for plates (two sets of 2)

i For more information go to www.eppendorf.com/centrifugation



Eppendorf Conical Tubes 15 mL and 50 mL
The Eppendorf Conical Tubes 15 mL and 50 mL are the optimal solution for cell culture and cell biology applications as well as for sample preparation protocols in microbiology and molecular biology laboratories. Safe design and easy handling ensure best sample processing.

- Premium USP class 6 raw material ensures**
- > high sample integrity
 - > high g-Safe® centrifugation stability
 - > optimal sample and pellet visibility

For more information see pages 161-179.



- Cell culture packages**
- > Extra high capacity for up to 108 x 15 mL or 52 x 50 mL conical tubes
 - > Accommodates both tubes and plates; no need for separate buckets¹⁾
 - > Max. 4,402 x g (in S-4-Universal-Large rotor)



- Blood collection tube package**
- > Extra high capacity for up to 196 x 13 mm or 148 x 16 mm blood collection tubes
 - > Includes aerosol-tight caps for safe centrifugation of hazardous samples⁵⁾
 - > Max. 4,140 x g



- Cell harvesting package**
- > Includes high capacity buckets and adapters for 108 x 15 mL conical tubes, 52 x 50 mL conical tubes, 8 x 250 mL conical bottles, and 8 x deepwell plates
 - > Includes round buckets and adapters for 4 x 1000 mL bottles
 - > Max. 3,428 x g

Ordering information

Description	Max. capacity of conical tubes per rotor	Catalog No.	List USD
Cell culture package (Universal) ²⁾	96 x 15 mL/40 x 50 mL	5948000930	Inquire
Cell culture package (S-4x1000) ²⁾	108 x 15 mL/52 x 50 mL	5948000239	Inquire
Blood tube package (Universal) ³⁾	196 x 13 mm/148 x 16 mm	5948000832	Inquire
Cell harvesting package (S-4x1000) ⁴⁾	4 x 1000 mL/8 x 250 mL/52 x 50 mL	2231000155	Inquire
Centrifuge 5920 R, refrigerated, 120 V 50/60 Hz	108 x 15 mL/8 x DWP	5948000131	Inquire

¹⁾ Plate carrier to lift plates of universal bucket needs to be ordered separately. ²⁾ Cell culture package includes a centrifuge and swing-bucket rotor plus the following adapters (sets of 2) for 15 mL and 50 mL conical tubes: 5920 R with S-4x1000 rotor with high capacity buckets = 2 x 5920716000, 2 x 5920715003; 5920 R with S-4xUniversal-Large rotor = 2 x 5920736000, 2 x 5920735004. ³⁾ Blood tube package includes a centrifuge and swing-bucket rotor plus the following adapters (sets of 2) for 13 mm and 16 mm blood tubes: 5920 R with S-4xUniversal-Large swing bucket rotor = 2 x 5920739000, 2 x 5920738003, 2 x 5920752006. ⁴⁾ Cell harvesting package includes 5920 R and S-4x1000 swing bucket rotor with: high capacity buckets, 2 x 5920717006, 2 x 5920716000, 2 x 5920715003, 2 x 5920729004 and round buckets plus 2 x 5920700006 (adapters for 1000 mL bottles). ⁵⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK.

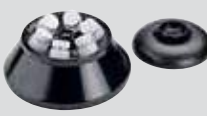
Rotors for 5920 R

				
Model	Rotor S-4xUniversal-Large	Rotor S-4x1000 with High-Capacity Buckets	Rotor S-4x1000 with 1 Liter Round Bucket	Rotor S-4x750 with round buckets
Positioning	Extra high capacity, tubes and plates in the same bucket	Extra high capacity, tubes and plates in the same bucket	Medium capacity, compatible with 1 Liter bottle	Medium capacity, high speed
Page	248	250	254	256
Universal bucket	yes	yes	no	no
Aerosol-tightness	yes	no	yes	yes
Max. capacity	4 x 750 mL	8 x 250 mL	4 x 1000 mL	4 x 750 mL
Max. RCF	4,402 x g	3,163 x g	3,428 x g	4,816 x g
Max. speed	4,300 rpm	3,700 rpm	3,700 rpm	4,700 rpm
1.5/2 mL micro tube	–	–	200	200
Eppendorf Tube® 5.0 mL and 15 mL conical	96	108	56	56
50 mL conical	40	52	28	28
13 mm blood tube	196	196	92	92
16 mm blood tube	148	144	80	80
750 mL bottle	4	–	4	4
1,000 mL bottle	–	–	4	–
MTP / DWP	24 / 6	24 / 8	28 / 8	16 / 4
List USD	\$4,340.00	\$3,600.00	\$3,310.00	\$3,538.00

Advanced Rotor Design – Swing-Bucket Rotors



- Rotor buckets for tubes and plates (selected rotors only)**
- Advantages:**
- > Time saving: No need to exchange buckets
 - > Cost saving: No need for separate plate buckets
 - > Space saving: No need to store different buckets
- Aerosol-tight QuickLock caps**
- > Significantly improved handling, easy operation with one or two hands
 - > Handle allows the closed bucket to be carried to the biosafety cabinet where it can be opened in a safe environment
 - > Aerosol-tightness has been tested and verified by Public Health England, Porton Down, UK

		
Rotor F-6x85	Rotor FA-6x50-hs	Rotor FA-48x2
Molecular applications in tubes up to 100 mL round bottom	High speed molecular applications in tubes up to 50 mL conical	Aerosol-tight microcentrifuge tube rotor
258	262	264
–	–	–
no	yes	yes
6 x 100 mL	6 x 50 mL	48 x 2 mL
18,500 x g	25,062 x g	22,132 x g
12,000 rpm	13,500 rpm	14,000 rpm
–	–	48
6	6	–
6	6	–
6	6	–
–	–	–
–	–	–
–	–	–
\$2,500.00	\$3,100.00	\$1,734.00

Advanced Rotor Design – Fixed-Angle Rotors



- Low rotor weight**
- Eppendorf’s fixed-angle rotors are among the lightest in the industry to improve handling and operational safety. Light-weight rotors cause less wear and tear on the motor and allow for faster acceleration and braking times.

- Eppendorf QuickLock® lids for ergonomic lid locking**
- Our aerosol-tight QuickLock rotors close with only ¼ of a turn. This not only saves you time during every day use, it also takes repetitive stress off your wrist.
- Superior temperature control**
- Aluminium, with its high heat conductivity, allows fast pre-cooling and accurate temperature control in refrigerated centrifuges.
- Perfect fit with Eppendorf Conical Tubes 15 mL and 50 mL**
- The Eppendorf Conical Tubes are characterized by an outstanding centrifugation stability of up to 19,500 x g*. This makes them suitable for a broad range of applications.

* Test conditions: Rotor FA-45-6-30 in Eppendorf Centrifuge 5810 R (using a suitable centrifuge adapter for 15 mL tube), sample: Saline solution (density: 1.0 g/mL), controlled centrifugation temp.: 25 °C, centrifugation time: 90 min

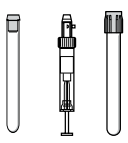
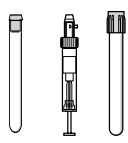
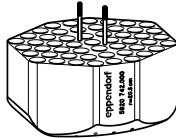
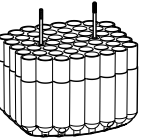
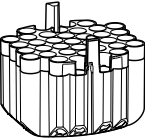
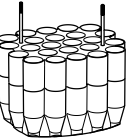
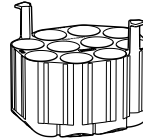
Rotor S-4xUniversal-Large



Rotor S-4xUniversal-Large

- > Extra High capacity swing-bucket rotor with max. speed 4,200 x g (4,300 rpm)
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 750 mL and plates
- > Universal bucket design accommodates both plates and tubes
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available ^{*1}
- > Buckets, caps and adapters are autoclavable

^{*1} Aerosol-tightness tested by Public Health England, Porton Down, UK.

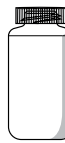
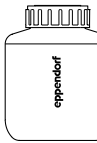
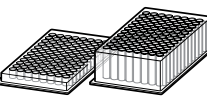
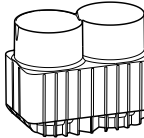
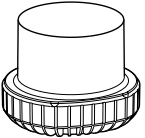
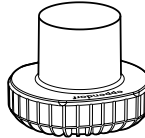
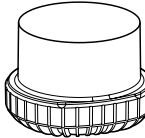
					
Tube Volume	5 mL FACS	2.6 - 8 mL	5.5 - 12 mL	Eppendorf Tube® 5.0 mL and 15 mL conical	50 mL conical
Max. tube diameter	12 mm	13 mm	16 mm	17 mm	31 mm
Max. vessel height	113 mm	110 mm	110 mm (125 mm in inner rows)	131 mm	131 mm
Max. vessel height for use with cap/lid	82 mm	107 mm	106 mm	123 mm	125 mm
Adapter					
Number of vessels per adapter/rotor	51/204	49/196	37/148	24/96	10/40
Bottom shape	round	round	round	conical	conical
Centrifugation radius	205 mm	205 mm	204 mm	218 mm	213 mm
Max. RCF	4,140 x g	4,140 x g	4,120 x g	4,402 x g	4,301 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5920742000	5920739000	5920738003	5920736000	5920735004
List USD	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00

¹⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.



Ordering information

Description	Catalog No.	List USD
Rotor S-4xUniversal-Large	5895190006	\$4,340.00
Universal-Large buckets, set of 2	5895193005	1,120.00
Universal-Large buckets, set of 4	5895192009	2,226.00
Aerosol-tight cap for Universal-Large buckets, set of 2	5920752006	292.00

				
250 mL flat, 175 – 225 mL conical ¹⁾	500 mL Corning®	500 mL Nalgene®	750 mL	MTP, DWP, PCR plates
62 mm	98 mm	70 mm	104 mm	–
133 mm	160 mm	168 mm	166 mm	116 mm
126 mm	148 mm	145 mm	143 mm	110 mm
				
2/8	1/4	1/4	1/4	5/20 (MTP) 2/8 (DWP)
flat	conical	flat	flat	flat
203 mm	208 mm	206 mm	202 mm	196 mm
4,099 x g	4,200 x g	4,160 x g	4,079 x g	3,938 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920740008	5920744003	5920745000	5920741004	5920737007
\$300.00	\$300.00	\$300.00	\$300.00	\$300.00

Rotor S-4x1000 with High-Capacity Buckets



Rotor S-4x1000 with High-Capacity Buckets

- > Extra High capacity swing-bucket rotor with max. speed 3,163 x g (3,700 rpm)*1
- > Bucket accommodates both plates and tubes
- > Buckets, caps and adapters are autoclavable
- > Saves money—no separate plate buckets needed¹⁾
- > Rotor lifetime: max. 100,000 cycles

¹⁾ Plate carrier to lift plates out of plate/tube bucket needs to be ordered separately.



Mixed loading with high capacity bucket and 1 liter round bucket.

Ordering information

Description	Catalog No.	List USD
Rotor S-4x1000, incl. high-capacity buckets	5895118003	\$3,600.00
Rotor S-4x1000, without buckets	5895101003	1,960.00
Buckets for Rotor S-4x1000, High-Capacity bucket for Rotor S-4x1000, set of 2	5895107001	1,120.00
Buckets for Rotor S-4x1000, High-Capacity bucket for Rotor S-4x1000, set of 4	5895106005	2,226.00
Plate carrier for high-capacity bucket, for MTP, DWP, PCR plates, Rotor S-4x1000, set of 2 pcs.	5920729004	300.00

Tube Volume	5 mL FACS	2.6 - 8 mL	5.5 - 12 mL
Max. tube diameter	12 mm	13 mm	16 mm
Max. vessel height	106 mm	112 mm	113 mm
Adapter			
Number of vessels per adapter/rotor	52/204	49/196	36/144
Bottom shape	round	round	round
Centrifugation radius	204 mm	204 mm	199 mm
Max. RCF	3,122 x g	3,122 x g	3,046 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5920724002	5920718002	5920720007
List USD	\$300.00	\$300.00	\$300.00

¹⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

9 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical	50 mL conical	250 mL flat, 175 – 250 mL conical ¹⁾	MTP, DWP, PCR plates
17.5 mm	17 mm	31 mm	62 mm	–
129 mm	120 mm	120 mm	145 mm	88 mm
29/116	27/108	13/52	2/8	6/24 (MTP) 2/8 (DWP)
round	conical	conical	flat	flat
204 mm	205 mm	206 mm	200 mm	185 mm
3,122 x g	3,138 x g	3,163 x g	3,061 x g	2,832 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920722000	5920716000	5920715003	5920717006	5920729004
\$300.00	\$300.00	\$300.00	\$300.00	\$300.00

Rotor S-4x1000 with Medium-Capacity Buckets



Rotor S-4x1000 with Medium-Capacity Buckets

- > Medium-capacity swing-bucket rotor with max. speed 3,092 x g (3,700 rpm)
- > Bucket accommodates both plates and tubes
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available¹⁾
- > Mixed loading with 2 high capacity buckets or 2 round tube buckets allows for increased versatility
- > Buckets, caps and adapters are autoclavable
- > Rotor lifetime: max. 100,000 cycles

Tube Volume	round-bottom tubes 2.6–7 mL	round-bottom tubes 3–15 mL	round-bottom tubes 7–17 mL	Eppendorf Tube® 5.0 mL and 15 mL
Max. tube diameter	13 mm	16 mm	17.5 mm	17 mm
Max. vessel height	109 mm	109 mm	109 mm	121 mm
Max. vessel height for use with cap/lid ¹⁾	108 ²⁾ mm	108 ³⁾ mm	109 ⁴⁾ mm	–
Adapter				
Number of vessels per adapter/ rotor	35/140	33/132	28/112	22/88
Bottom shape	round	round	round	conical
Centrifugation radius	201 mm	200 mm	200 mm	201 mm
Max. RCF	3,076 x g	3,061 x g	3,061 x g	3,076 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5920706004	5920707000	5920708007	5920710001
List USD	\$300.00	\$300.00	\$300.00	\$300.00

¹⁾ Please perform a manual test to determine the actual loading capacity. ²⁾ in 25 center pos. ³⁾ in 23 center pos. ⁴⁾ in 22 center pos. ⁵⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK.

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.



Ordering information

Description	Catalog No.	List USD
Rotor S-4x1000, incl. medium capacity bucket	5895117007	\$3,310.00
Rotor S-4x1000, without buckets	5895101003	1,960.00
Plate carrier for medium capacity bucket, for MTP, DWP, PCR plates, Rotor S-4x1000, set of 2 pcs.	5920705008	300.00
Aerosol-tight caps, for S-4x1000 medium capacity and S-4x750 plate bucket, set of 2	5895111009	290.00
Buckets for Rotor S-4x1000, medium capacity for Rotor S-4x1000, set of 2 pcs.	5895105009	994.00
Buckets for Rotor S-4x1000, medium capacity for Rotor S-4x1000, set of 4	5895104002	1,922.00

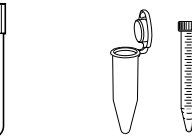
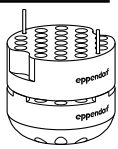
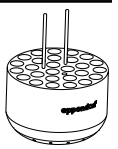
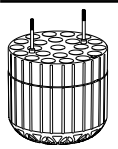
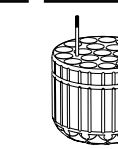
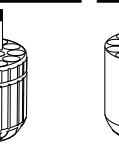
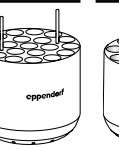
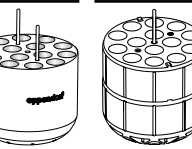
Eppendorf Tube® 5.0 mL and 15 mL	50 mL conical	50 mL conical	MTP, DWP, PCR plates
17 mm	31 mm	31 mm	–
121 mm	122 mm	121 mm	104 mm
121 mm	–	121 mm	91 mm
16/64	10/40	7/28	7/28 (MTP) 2/8 (DWP)
conical	conical	conical	flat
202 mm	201 mm	201 mm	198 mm
3,092 x g	3,076 x g	3,076 x g	3,030 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5920712004	5920709003	5920711008	5920705008
\$300.00	\$300.00	\$300.00	\$300.00

Rotor S-4x1000 with 1 Liter Round Buckets



Rotor S-4x1000 with 1 Liter Round Buckets

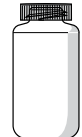
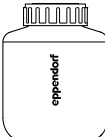
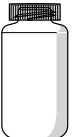
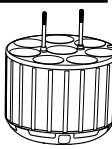
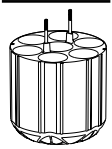
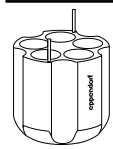
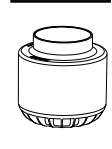
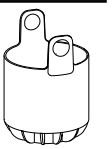
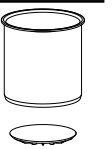
- > Medium capacity swing-bucket rotor with max. speed 3,428 x g (3,700 rpm)¹⁾
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 1000 mL
- > Mixed loading with 2 high capacity buckets or 2 plate/tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available
- > Buckets, caps and adapters are autoclavable
- > Rotor lifetime: max. 100,000 cycles

							
Tube Volume	1.5/ 2.0 mL	12 mm x 75 mm, 5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL	Eppendorf Tubes® 5.0 mL and 15 mL conical tubes
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm	17 mm
Max. vessel height	39 mm	115 mm	121 mm	130 mm	130 mm	117 mm	161 mm
Max. vessel height for use with cap/lid ¹⁾	39 mm	108 mm	113 mm	120 mm	112 mm	112 mm	150 mm
Adapter							
Number of vessels per adapter/rotor	50/200	27/108	23/92	20/80	20/80	14/56	14/56
Bottom shape	flat	round	round	round	round	round	conical
Centrifugation radius	219 mm	211 mm	210 mm	211 mm	210 mm	210 mm	224 mm
Max. RCF	3,352 x g	3,229 x g	3,214 x g	3,229 x g	3,214 x g	3,214 x g	3,428 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5825740009	5825747003	5825738004	5825736001	5825743008	5825748000	5825734009
List USD	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.²⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer.

Ordering information

Description	Catalog No.	List USD
Rotor S-4x1000, incl. 4x 1000 mL round buckets	5895100007	\$3,310.00
Rotor S-4x1000, without buckets	5895101003	1,960.00
Buckets for Rotor S-4x1000, 1 Liter Round bucket for Rotor S-4x1000, set of 2	5895103006	994.00
Buckets for Rotor S-4x1000, 1 Liter Round bucket for Rotor S-4x1000, set of 4	5895102000	1,922.00
Aerosol-tight caps for 750 mL round buckets, for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pieces	5820747005	293.00

									
30 mL	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225 mL conical ²⁾	500 mL Corning®	500 mL Nalgene	600 mL TPP	750 mL	1 Liter Nalgene	MTP, DWP, PCR plates
25 mm	31 mm	31 mm	62 mm	98 mm	–	98 mm	104 mm	98 mm	–
145 mm	156 mm	151 mm	176 mm	167 mm	180 mm	181 mm	150 mm	185 mm	104 mm
138 mm	150 mm	147 mm	156 mm	–	–	–	–	–	91 mm
									
8/32	7/28	5/20	1/4	1/4	1/4	1/4	1/4	1/4	7/28 (MTP) 2/8 (DWP)
flat	conical	flat	flat	conical	flat	conical	flat	flat	flat
210 mm	223 mm	209 mm	214 mm	218 mm	221 mm	224 mm	216 mm	218 mm	198 mm
3,222 x g	3,413 x g	3,199 x g	3,275 x g	3,336 x g	3,382 x g	3,428 x g	3,306 x g	3,336 x g	3,030 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5825755006	5825733002	5825732006	5825741005	5825745000	5920703005	5920701002	5825744004	5920700006	5895105009
Inquire	\$302.00	\$302.00	\$302.00	\$302.00	\$300.00	\$300.00	\$186.00	\$300.00	\$994.00

Rotor S-4x750



Rotor S-4x750

- > Medium capacity swing-bucket rotor with max. speed 4,800 x g (4,700 rpm)¹⁾
- > Broad range of adapters enables high versatility for tubes and flasks from 0.2 mL to 750 mL and plates
- > Mixed loading with 2 plate buckets and 2 round tube buckets allows for increased versatility
- > Aerosol-tight QuickLock caps for safe centrifugation of hazardous samples optionally available ³⁾
- > Buckets, caps and adapters are autoclavable
- > Rotor lifetime: max. 100,000 cycles

Tube Volume	1.5/ 2.0 mL	12 mm x 75 mm, 5 mL FACS	2.6 – 8 mL	5.5 – 12 mL	9 mL	14 mL
Max. tube diameter	11 mm	12 mm	13 mm	16 mm	17.5 mm	17.5 mm
Max. vessel height	39 mm	115 mm	121 mm	125 mm (130 mm in 2 inner rows)	117 mm (130 mm in 2 inner rows)	117 mm
Max. vessel height for use with cap/lid ¹⁾	39 mm	108 mm	113 mm	120 mm	112 mm	112 mm
Adapter						
Number of vessels per adapter/rotor	50/200	27/108	23/92	20/80	20/80	14/56
Bottom shape	flat	round	round	round	round	round
Centrifugation radius	219 mm	211 mm	210 mm	211 mm	210 mm	210 mm
Max. RCF	4,800 x g	4,593 x g	4,569 x g	4,594 x g	4,569 x g	4,569 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5825740009	5825747003	5825738004	5825736001	5825743008	5825748000
List USD	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00	\$302.00

¹⁾ Exceeding the maximum tube length may reduce the loading capacity of the rotor. Please perform a manual swing-out test before starting the centrifuge run to make sure the tubes do not hit the rotor yoke.²⁾ Please note that these conical bottles need to be used together with a conical form insert provided by the manufacturer. ³⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK.

Ordering information

Description	Catalog No.	List USD
Rotor S-4x750, without buckets	5895121004	\$1,960.00
Rotor S-4x750, incl. 4 x 750 mL round buckets	5895120008	3,538.00
Buckets for Rotor S-4x750, Round buckets for Rotor S-4x750, set of 4	5895122000	1,922.00
Buckets for Rotor S-4x750, Round buckets for Rotor S-4x750, set of 2	5895123007	994.00
Buckets for Rotor S-4x750, Plate bucket (aerosol-tight capable), incl. plate carrier, set of 4	5895124003	1,922.00
Buckets for Rotor S-4x750, Plate bucket (aerosol-tight capable), incl. plate carrier, set of 2	5895125000	994.00
Aerosol-tight caps for plate buckets (aerosol-tight capable), for Rotor S-4-104 and Rotor S-4x750, set of 2 pieces	022638937	293.00
Aerosol-tight caps for 750 mL round buckets, for Rotor S-4-104, Rotor S-4x750 and Rotor S-4x1000, set of 2 pieces	5820747005	260.00
Wide-neck bottle, 750 mL, set of 2 pieces	5820708000	282.00

Eppendorf Tubes® 5.0 mL and 15 mL conical tubes	30 mL	50 mL conical	50 mL conical, skirted	250 mL flat, 175 – 225 mL conical ²⁾	500 mL Corning®	MTP, DWP, PCR plates
17 mm	25 mm	31 mm	31 mm	62 mm	98 mm	–
161 mm	145 mm	156 mm	151 mm	176 mm	167 mm	60 mm
150 mm	138 mm	150 mm	147 mm	156 mm	–	45 mm
14/56	8/32	7/28	5/20	1/4	1/4	4/16 (MTP) 1/4 (DWP)
conical	flat	conical	flat	flat	conical	flat
224 mm	210 mm	223 mm	209 mm	214 mm	218 mm	151 mm
4,643 x g	4,445 x g	4,618 x g	4,371 x g	4,519 x g	4,594 x g	3,976 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
5825734009	5825755006	5825733002	5825732006	5825741005	5825745000	022638930
\$302.00	Inquire	\$302.00	\$302.00	\$302.00	\$302.00	\$956.00



Rotor F-6x85



Rotor F-6x85

- > High-speed rotor for molecular applications in tubes from 0.2 mL to 100 mL
- > Max. speed 18,500 × g
- > Low rotor weight (3.2 kg) for easy handling
- > 34° borehole angle reduces pellet smears along tube wall
- > Anodized aluminum for high chemical resistance
- > Rotor, lid and adapters are autoclavable
- > Rotor lifetime: max. 75,000 cycles

Tube Volume	1.5 – 2.0 mL	2.6 – 7 mL	2.6 – 7 mL	7 – 15 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	11 mm	13 mm	13 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	110 mm	90 mm	110 mm	112 mm	104 mm
Adapter					
Number of vessels per adapter/rotor	4/24	3/18	3/18	2/12	1/6
Bottom shape	round	flat	flat	round	conical
Centrifugation radius	113 mm	106 mm	114 mm	112 mm	105 mm
Max. RCF	18,200 x g	17,070 x g	18,350 x g	18,000 x g	16,824 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	022637215	022637279	022637282	022637223	5804777000
List USD	\$166.00	\$166.00	\$166.00	\$166.00	\$162.00



Ordering information

Description	Catalog No.	List USD
Rotor F-6x85, incl. rotor lid	5895140009	\$2,500.00

15 mL conical	15 – 18 mL	20 – 30 mL	50 mL	50 mL conical	85 mL
17 mm	18 mm	26 mm	29 mm	31 mm	38 mm
123 mm	123 mm	123 mm	123 mm	121 mm	121 mm
1/6	1/6	1/6	1/6	1/6	-/6
conical	round	round	round	conical	round
107 mm	109 mm	110 mm	112 mm	108 mm	115 mm
17,200 x g	17,550 x g	17,700 x g	18,000 x g	17,400 x g	18,500 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	–
022637274	022637231	022637240	022637258	022637266	–
\$166.00	\$166.00	\$166.00	\$166.00	\$166.00	–

Rotor FA-6x50



Rotor FA-6x50

- > Rotor for molecular applications in tubes from 5–50 mL
- > Max. speed 20,130 x g (12,100 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight^{†1} for safe centrifugation of hazardous samples
- > Low rotor weight (3.2 kg) for easy handling
- > Anodized aluminum for high chemical resistance
- > 45° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable
- > Rotor lifetime: max. 100,000 cycles

Tube Volume	round-bottom tube 2.6–5 mL	round-bottom tube 4–8 mL	round-bottom tube 5.5–10 mL	round-bottom tube 7.5–12 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	13 mm	13 mm	16 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	119 mm	119 mm	119 mm	119 mm	121 mm
Adapter					
Number of vessels per adapter/rotor	1/6	1/6	1/6	1/6	1/6
Bottom shape	round	round	round	round	conical
Centrifugation radius	120 mm	120 mm	120 mm	120 mm	121 mm
Max. RCF	19,246 x g	19,246 x g	19,246 x g	19,246 x g	19,806 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5820726008	5820725001	5820728000	5820727004	5820730005
List USD	\$166.00	\$166.00	\$166.00	\$166.00	\$162.00

^{†1} Aerosol-tightness tested by Public Health England, Porton Down, UK.

Ordering information

Description	Catalog No.	List USD
Rotor FA-6x50, incl. rotor lid	5895150004	\$2,600.00

round-bottom tube 7–17 mL	conical tube 15 mL	round-bottom tube 15–18 mL	round-bottom tube 20–30 mL	tube 35 mL	conical tubes 50 mL
17.5 mm	17 mm	18 mm	26 mm	29 mm	31 mm
122 mm	125 mm	125 mm	125 mm	125 mm	121 mm
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
19,246 x g	19,246 x g	19,246 x g	17,187 x g	18,333 x g	–
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	–
5820729007	5820717009	5820720000	5820721006	5820722002	–
\$166.00	\$166.00	\$166.00	\$166.00	\$166.00	–

Rotor FA-6x50-hs



Rotor FA-6x50-hs

- > High-speed rotor for applications in tubes from 5–50 mL
- > Max. speed 25,062 x g (13,500 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight¹⁾ for safe centrifugation of hazardous samples
- > Low rotor weight for easy handling
- > Anodized aluminum for high chemical resistance
- > 45° borehole angle minimizes pellets smear
- > Rotor, lid and adapters are autoclavable

Tube Volume	round-bottom tube 2.6–5 mL	round-bottom tube 4–8 mL	round-bottom tube 5.5–10 mL	round-bottom tube 7.5–12 mL	Eppendorf Tubes® 5.0 mL
Max. tube diameter	13 mm	13 mm	16 mm	16 mm	17 mm
Max. vessel height for use with cap/lid	119 mm	119 mm	119 mm	119 mm	121 mm
Adapter					
Number of vessels per adapter/rotor	1/6	1/6	1/6	1/6	1/6
Bottom shape	round	round	round	round	conical
Centrifugation radius	120 mm	120 mm	120 mm	120 mm	121 mm
Max. RCF	24,450 x g	24,450 x g	24,450 x g	24,450 x g	24,654 x g
Packing	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.
Catalog No.	5820726008	5820725001	5820728000	5820727004	5820730005
List USD	\$166.00	\$166.00	\$166.00	\$166.00	\$162.00

¹⁾ Aerosol-tightness tested by Health Protection Agency, Porton Down, UK.

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.

Ordering information

Description	Catalog No.	List USD
Rotor FA-6x50-hs, incl. rotor lid	5895165001	\$3,100.00

round-bottom tube 7–17 mL	conical tube 15 mL	round-bottom tube 15–18 mL	round-bottom tube 20–30 mL	tube 35 mL	conical tubes 50 mL
17.5 mm	17 mm	18 mm	26 mm	29 mm	31 mm
122 mm	125 mm	125 mm	125 mm	125 mm	121 mm
1/6	1/6	1/6	1/6	1/6	-/6
round	conical	round	round	conical	conical
120 mm	120 mm	120 mm	105 mm	112 mm	123 mm
24,450 x g	24,450 x g	24,450 x g	21,394 x g	22,820 x g	25,062 x g
set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	set of 2 pcs.	–
5820729007	5820717009	5820720000	5820721006	5820722002	–
\$166.00	\$166.00	\$166.00	\$166.00	\$166.00	–

Rotors for 5920 R



Rotor FA-20x5

- > 20 places for Eppendorf Tube 5.0 mL
- > Max. speed: 20,913 × g (13,100 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight[†] for safe centrifugation of hazardous samples
- > Rotor, lid and adapters are autoclavable (121 °C, 20 min)
- > Anodized aluminium for high chemical resistance
- > Rotor lifetime: max. 100,000 cycles



Rotor FA-48x2

- > 48 places for 1.5/2.0 mL tubes
- > Max. speed: 22,132 × g (14,000 rpm)
- > Eppendorf QuickLock rotor lid for fast lid locking
- > Aerosol-tight[†] for safe centrifugation of hazardous samples
- > Anodized aluminum for high chemical resistance
- > Rotor and lid are autoclavable (121 °C, 20 min)
- > Rotor lifetime: max. 100,000 cycles

Ordering information

Description	Catalog No.	List USD
Rotor FA-20x5 , for 20 Eppendorf Tubes® 5.0 mL, incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895130003	\$1,734.00
Rotor FA-48x2 , incl. aerosol-tight Eppendorf QuickLock® rotor lid	5895135005	1,734.00
Adapter , for 1 vessel 1.5 – 2.0 mL, for all 5.0 mL rotors, set of 4 pcs.	5820768002	43.10
Adapter , for 1 cryo tube, for all 5.0 mL rotors, set of 4 pcs.	5820769009	43.10
Adapter , for 1 HLPC tube, for all 5.0 mL rotors, set of 4 pcs.	5820770007	43.10
Adapter , for 1 tube 0.5 mL, max. Ø 6 mm or microtainer 0.6 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636227	34.20
Adapter , for 1 tube 0.4 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636243	34.20
Adapter , for 1 PCR tube 0.2 mL, max. Ø 6 mm, for all 1.5/2.0 mL rotors, set of 6 pcs.	022636260	34.20

[†] Aerosol-tightness tested by Public Health England, Porton Down, UK.

i For more information go to www.eppendorf.com/centrifugation

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf epGreen® Initiative

Eppendorf epGreen Initiative
Eppendorf centrifuges offer the following epGreen features.

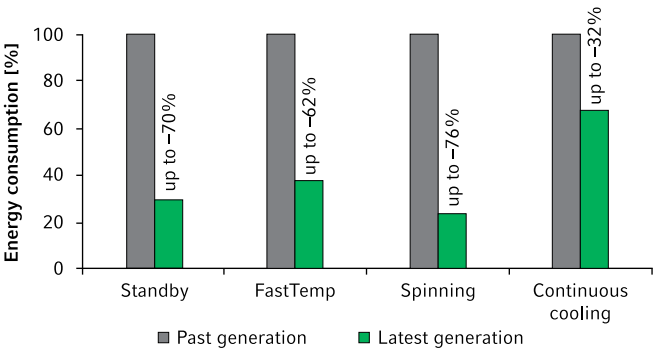
- Centrifuges in general:**
- > All Centrifuges are designed with a brushless induction motor to provide maintenance-free operation, eliminating carbon particle emissions
 - > Rotors are made of recyclable aluminum
 - > All Centrifuges are designed for low noise emission. Some of the new microcentrifuges can even be operated without the rotor lid, without any significant increase in sound volume

- Refrigerated models feature:**
- > Patented, dynamic compressor control^{*2} for precise cooling performance
 - > CFC-free refrigerant with an ozone depletion potential (ODP) of zero
 - > ECO shut-off deactivates the compressor after 8 hours of inactivity to reduce energy consumption and extend compressor life
- Centrifuge packaging:**
The inner- and outer centrifuge packaging are made of 100 % recyclable materials

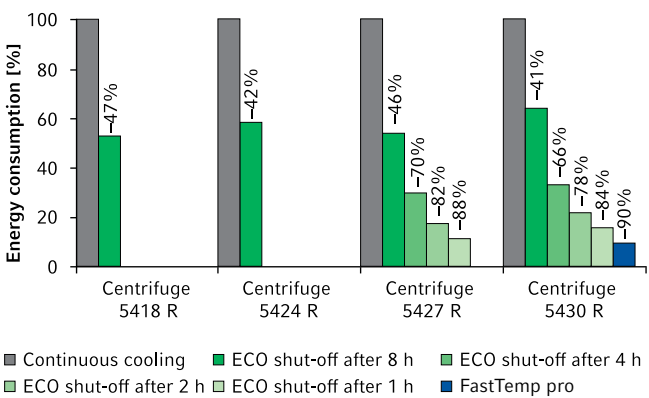
^{*2} US Patent 6,866,621



Save energy with every new generation of Eppendorf centrifuges



Energy savings overnight with ECO shut-off and FastTemp pro





Centrifuge Performance Plans

Preventive Maintenance

Quality Management Systems increasingly ask for regular service of centrifuges and rotors in either an operational or a disassembled state to ensure a safe working environment. Functional inspections ensure that all technical specifications,

such as temperature accuracy, rotational speed and operating time comply with the manufacturer specifications. The Centrifuge Performance Plans assist with your preparation for internal and external audits.

Performance Plans	ESSENTIAL CHECK	ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
Group 1 - Non-refrigerated microcentrifuge	0082020003	0082020004	0082020005	5424860036	0082020008
Group 2 - Refrigerated microcentrifuge	0082020013	0082020014	0082020015	5424860044	0082020018
Group 3 - Non-refrigerated multipurpose centrifuge	0082020023	0082020024	0082020025	5810860040	0082020028
Group 4 - Refrigerated multipurpose centrifuge	0082020033	0082020034	0082020035	5810860059	0082020038
Cleaning and Maintenance					
Cleaning of housing/Checking condensation water tray*	■	■	■		
Cleaning and checking of rotor bowl and internal parts		■	■		
Checking of instrument for any damage	■	■			■
Checking of stability, housing, display and keypad		■	■		
Checking of display and keypad/Software update if required		■	■		
Checking of lid latch	■	■	■		■
Functional check					
Instrument set-up/Initial operation / Instruction of user				■	
Checking of rotor detection	■	■			
Checking of temperature sensors* and speed sensor		■	■		■
Checking of imbalance detection*		■	■		
Performing system test run	■	■	■	■	■
Memory					
Evaluating of stored data		■	■		
Verification					
Verification of operating parameters acc. to specifications					■ ***
Documentation					
Check List provided	■	■	■		
Dated service sticker to confirm Eppendorf service	■	■	■	■	■
IQ Report and Certificate				■	
OQ Report and Certificate					■
Supporting Information					
Contract period	one year	one year	one year	N/A	N/A
Time/labor included	once	once	all	once	once
Additional parts	not included	not included	included	not included	not included

Additional order numbers for combined Installation and Operational Qualification (IQ/OQ) services:

- > for microcentrifuge w/o refrigeration: 0082020009
- > for microcentrifuge with refrigeration: 0082020019
- > for multipurpose w/o refrigeration: 0082020029
- > for multipurpose with refrigeration: 0082020039

* Where feature is present. ** Please contact your local Eppendorf Service representative for details of discounts and/or any potential additional charges applying. Additionally, if you require a Customized Service we will be very pleased to discuss your requirements. *** The detailed certification service contents are listed in the OQ Report.



Centrifuge Service Products

Service for peace of mind and the long life of your Eppendorf® centrifuge

We have developed service programs and options tailored to your needs in order to ensure your centrifuge is operating consistently at peak performance. You probably purchased an Eppendorf centrifuge because of the value you expect from its features—high quality, excellent design and reliability. Now you can further extend that value and the life of your centrifuge through Eppendorf service and support.

For more information go to www.eppendorf.com/epServices.



Extended Warranty

Your new Eppendorf Centrifuge comes with a 2-year warranty which covers all parts and labor should the system ever need repair. When you purchase your centrifuge or when the warranty period is over¹ you may also purchase additional years of warranty coverage. Smaller systems are returned to our Service Center for repair and Field Service is available for larger multipurpose centrifuges.

1-year Extended Warranty	Catalog No.	List USD
Group 1 - Non-refrigerated microcentrifuge ²	901513548	\$ 300.00
Group 2 - Refrigerated microcentrifuge ³	901513550	650.00
Group 3 - Non-refrigerated multipurpose centrifuge ⁴	901513552	725.00
Group 4 - Refrigerated multipurpose centrifuge ⁵	901513554	1,200.00

Flat Fee Repair

An easy to use value packaged service option when a repair is needed for systems not covered under a warranty or extended warranty. All it takes is one call to our Service Center and for a single fee we will repair the instrument, complete a full preventive maintenance, repair anything else we find, plus include a full year warranty on the whole system, not just the repair. Instrument return shipment is also included.

Flat Fee Repair Service	Catalog No.	List USD
Group 1 - Non-refrigerated microcentrifuge ⁶	901513536	\$ 600.00
Group 2 - Refrigerated microcentrifuge ⁷	901513538	1,500.00

Advantage OS

The same great value of Advantage Service offered at our service centers is now available as Advantage OS (On-Site) for our larger Field Serviced Centrifuges. Like all Advantage Service products, preventive maintenance is provided plus an additional repair visit if needed. For both visits all parts, labor and travel are included. Should additional service be needed beyond the two visits within the 1 year agreement period, you may option for early renewal or a 10% discount on parts labor and travel until expiration.

Advantage OS	Catalog No.	List USD
Group 1 - Non-refrigerated microcentrifuge ⁸	901513540	\$ 800.00
Group 2 - Refrigerated microcentrifuge ⁹	901513542	1,000.00
Group 3 - Non-refrigerated multipurpose centrifuge ¹⁰	901513544	1,100.00
Group 4 - Refrigerated multipurpose centrifuge ¹¹	901513546	1,600.00

¹ An extended warranty can be purchased during the manufacturer's warranty period. Instruments that are no longer under manufacturer's warranty require a preventive maintenance evaluation, before an extended warranty can be purchased. ² Includes MiniSpin/plus, Centrifuge 5418, Centrifuge 5424, and Centrifuge 5430. ³ Includes Centrifuge 5415 R, Centrifuge 5417 R, Centrifuge 5418 R, Centrifuge 5424 R, and Centrifuge 5430 R. ⁴ Includes Centrifuge 5702, Centrifuge 5804, and Centrifuge 5810. ⁵ Includes Centrifuge 5702 R, Centrifuge 5702 RH, Centrifuge 5804 R, Centrifuge 5810 R, and Centrifuge 5920 R. ⁶ Includes MiniSpin/plus, Centrifuge 5418, and Centrifuge 5424. ⁷ Includes Centrifuge 5415 R, Centrifuge 5417 R, Centrifuge 5418 R, and Centrifuge 5424 R. ⁸ Includes Centrifuge 5430 and Centrifuge 5702. ⁹ Includes 5430 R. ¹⁰ Includes Centrifuge 5804 and Centrifuge 5810. ¹¹ Includes Centrifuge 5702 R, Centrifuge 5702 RH, Centrifuge 5804 R, Centrifuge 5810 R, and Centrifuge 5920 R.



Rotor Assurance Plans

Inspection Services

Rotors and buckets are subject to normal wear and tear during regular operation and may be damaged as a result. Surface scratches, among others, can affect the chemical resistance and accelerate the corrosion process. The stress of high number of cycles increases the likelihood of microscopic cracks. These microcracks can be detected early on during a qualified inspection, which will allow the rotor to be exchanged before serious damage has occurred. Our certified, qualified service technicians use sophisticated borescope devices to detect invisible, yet critical, cracks and scratches. If none or very few surface changes are identified, the rotor can be used according to instructions - or for an additional year if the inspection was performed at the end of the recommended service life.



Inspection service for rotors	Recommended service periods
Visual rotor check*	Annually
Advanced rotor check	From twice per service life to annually

*For all Eppendorf rotors and accessories



Rotor with “blistering” on the edge



Rotor with internal “pitting corrosion”



Service features

- > Confidence for safest operation
- > Rotor care/use instructions
- > Detailed test report
- > Discount on new rotor

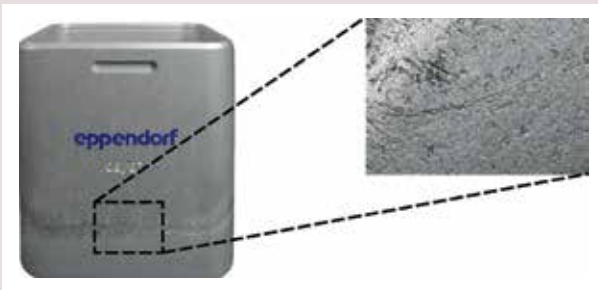
Long-term benefits

- > Dependability and safe operation
- > Sample integrity and consistent performance
- > Maximizing rotor service life



For more information go to www.eppendorf.com/epServices. In selected countries only.

Group 1 Fixed-angle rotors		Group 2 Fixed-angle rotors		Group 3 Swing-bucket rotors and buckets	
All fixed-angle rotors for 1.5/2.0 mL tubes, PCR strips, 5.0 mL tubes, and 15 mL conical tubes		All fixed-angle rotors for 50 mL conical tube and 85 mL round-bottom tubes		All swing-bucket rotors	
5424860109	\$102.00	5424860109	\$102.00	5810860113	\$125.00
5424860206	175.00	5810860237	150.00	5810860245	195.00



Pay attention to surface damage, as chemicals can collect in these areas due to insufficient cleaning. Even light scratches and cracks can lead to serious, internal material damage. Rotors and buckets with signs of corrosion may no longer be used! Buckets for rotors A-4-44 and A-4-62 have visible surface structures as a result of the production process, which are not considered defects.



Model	MC pro	MC pro S	MC pro 384
Page	272	273	273
Dimensions (W x D x H)	10.2 x 16.3 x 14.6 in / 26 x 41.5 x 37 cm	10.2 x 16.3 x 14.6 in / 26 x 41.5 x 37 cm	10.2 x 16.3 x 14.6 in / 26 x 41.5 x 37 cm
Gradient block	Over 12 rows	Over 12 rows	Over 24 rows
Heating rate	4 °C/s ¹⁾	6 °C/s ¹⁾	4 °C/s ¹⁾
Cooling rate	3 °C/s ¹⁾	4.5 °C/s ¹⁾	3 °C/s ¹⁾
Interfaces	1 x Centronics, 1 x RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 x Centronics, 1 x RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 x Centronics, 1 x RS-232, USB at Control Panel, one each of CAN_in/CAN_out
Lid descent and closing pressure	<i>vapo.protect</i> ® technology, with TSP	<i>vapo.protect</i> ® technology, with TSP	<i>vapo.protect</i> ® technology, with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C
Sample capacity	96 x 0.2 mL PCR tubes or 1 PCR plate 8 x 12	96 x 0.2 mL PCR tubes or 1 PCR plate 8 x 12	1 PCR plate 384
Gradient temperature range	30 – 99 °C	30 – 99 °C	30 – 99 °C
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C
Thermoblock	Aluminum	Silver	Aluminum

¹⁾ measured at the block

i For more information go to www.eppendorf.com



MC nexus GX2	MC nexus GSX1	MC nexus SX1	MC nexus gradient	MC nexus
278	281	281	281	280
Dimensions (W x D x H)	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm
Gradient block	Over 8 rows (0.2 mL tubes) or over 7 rows (0.5 mL tubes)	Over 12 rows (0.2 mL)	Over 12 rows	–
Heating rate	3 °C/s ¹⁾	5 °C/s ¹⁾	3 °C/s ¹⁾	3 °C/s ¹⁾
Cooling rate	2 °C/s ¹⁾	3.5 °C/s ¹⁾	2 °C/s ¹⁾	2 °C/s ¹⁾
Interfaces	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB
Lid descent and closing pressure	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Sample capacity	64/32 x 0.2 mL PCR tubes or up to 64 x 0.5 mL PCR tubes	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes
Gradient temperature range	30 – 99 °C	30 – 99 °C	–	30 – 99 °C
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
Thermoblock	Aluminum	Silver	Silver	Aluminum

Mastercycler® pro



Description
Fast speeds, high precision, easy usage and absolute reliability united in a flexible concept – that is the Mastercycler pro. Today’s requirements for PCR in your lab are defined by today’s research project. Tomorrow, new questions will arise and new experiments have to give the answers. That is why only an open and flexible system fits into today’s lab. Eppendorf’s Mastercycler pro offers ultimate flexibility:

- > Choose from three block formats
- > Operate the Mastercycler pro in three different configurations (Single instrument with a control panel, up to 5 instruments with a control panel, up to 30 with a computer and CycleManager Pro software)
- > Use any plate, tube or strip you want
- > Unsurpassed speed can be achieved with Eppendorf’s Impulse PCR, a device driven hot-start function that increases heating rates to 8 °C/s (only available in Mastercycler pro S)

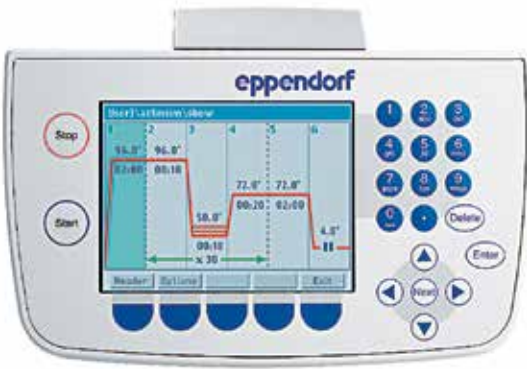
Applications

- > Standard PCR
- > Gradient PCR for protocol optimization
- > Fast PCR
- > Cycle sequencing

Product features

- > Extremely fast heating and cooling rates
- > Ultimate reduction of evaporation
- > Gradient blocks with SteadySlope® technology
- > Intuitive graphic programming
- > Display to indicate cycler number in a network
- > 2 years warranty
- > Optional self-test dongle available

i For more information go to www.eppendorf.com/pcr



The control panel enables flexible and intuitive operation of all versions of the Mastercycler pro.

Technical specifications			
Model	MC pro	MC pro S	MC pro 384
Sample capacity	96 × 0.2 mL PCR tubes or 1 PCR plate 8 × 12	96 × 0.2 mL PCR tubes or 1 PCR plate 8 × 12	1 PCR plate 384
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C
Temperature control mode	Fast, Standard, Safe	Fast, Standard, Safe	Fast, Standard, Safe
Heating technology of the block	Peltier elements, Triple Circuit technology	Peltier elements, Triple Circuit technology	Peltier elements, Triple Circuit technology
Silver block	■		
Gradient range	1 – 20 °C	1 – 24 °C	1 – 20 °C
Gradient temperature range	30 – 99 °C	30 – 99 °C	30 – 99 °C
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C
Lid descent and closing pressure	vapo.protect® technology, with TSP	vapo.protect® technology, with TSP	vapo.protect® technology, with TSP
USB port	■		
Block homogeneity 20–72 °C	± 0.3 °C	± 0.3 °C	± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	± 0.4 °C	± 0.4 °C	± 0.4 °C
Heating rate	4 °C/s ¹⁾	6 °C/s ¹⁾	4 °C/s ¹⁾
Cooling rate	3 °C/s ¹⁾	4.5 °C/s ¹⁾	3 °C/s ¹⁾
Gradient block	Over 12 columns	Over 12 columns	Over 24 columns
Interfaces	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out	1 × Centronics, 1 × RS-232, USB at Control Panel, one each of CAN_in/CAN_out
Total weight	40.8 lb / 18.5 kg	40.8 lb / 18.5 kg	40.8 lb / 18.5 kg
Max. power consumption	950 W	950 W	950 W
Dimensions (W × D × H)	10.2 × 16.3 × 14.6 in / 26 × 41.5 × 37 cm	10.2 × 16.3 × 14.6 in / 26 × 41.5 × 37 cm	10.2 × 16.3 × 14.6 in / 26 × 41.5 × 37 cm
Thermoblock	Aluminum	Silver	Aluminum

¹⁾ measured at the block



Mastercycler® pro



Up to 5 individual Mastercycler pro modules can be controlled using one control panel.

Ordering information		
Description	Catalog No.	List USD
Mastercycler® pro, 110 V/50 – 60 Hz (US)	950030010	\$ 8,670.00
Mastercycler® pro, with Control Panel, 110 V/50 – 60 Hz (US)	950040015	9,740.00
Mastercycler® pro S, 110 V/50 – 60 Hz (US)	950030020	9,640.00
Mastercycler® pro S, with Control Panel, 110 V/50 – 60 Hz (US)	950040025	10,590.00
CAN bus connecting cable, 150 cm	950014016	54.00
CAN bus connecting cable, 50 cm	950014008	44.00
Control Panel, incl. connecting cable	950030050	2,400.00
MultiMediaCard, for archiving parameters and transporting data between the control panel and PC, not for Eppendorf EasyCon™ control panel	960002008	97.50
Self-Test Dongle	950030040	320.00

i For more information go to www.eppendorf.com/pcr



CycleManager pro



Description
The Mastercycler pro is optimized for high throughput. Up to 30 units of any block format (96 well or 384 well) combination can be controlled with one computer. The CycleManager pro software offers a client/server architecture, that enables one to check the status of the PCR from any computer in your local network. Administrator functions, password protection, individual user folders, intuitive software including the running information of the cyclers and an import/ export functionality complete the set of convenient features. All collected data is archived in a database. If you are working in a GLP environment, your documentation needs will be strongly supported by the software. All 30 units can run different protocols at the same time for extreme flexibility!

Ordering information		
Description	Catalog No.	List USD
CycleManager pro, incl. installation instructions, comprehensive online help, connecting cables (950017058 USB CAN, 950017066 PEAK CAN)	950017007	\$2,460.00
CycleManager pro, incl. installation instructions, comprehensive online help	950017202	1,810.00
CycleManager pro XL, incl. instructions, comprehensive online help, connecting cables (950017058 USB CAN, 950017066 PEAK CAN)	950018008	6,840.00

Temperature Verification System - USB - Single Channel



Temperature Verification System - USB - Single Channel

- > Measuring device with a separate temperature sensor
- > Sensor for 96 well or 384 well blocks, sold separately
- > Simple, rapid verification and adjustment
- > Automatic adjustment with Mastercycler software, version 2.10 or higher

Ordering information		
Description	Catalog No.	List USD
Temperature Verification System - USB - Single Channel Measuring Device	0056000003	\$3,700.00
Temperature sensor for 96 Well	0056001000	1,140.00
Temperature sensor for 384 Well	0056002006	1,000.00

Mastercycler® nexus X2



- 1. Connects with up to two additional Mastercycler nexus eco units for higher throughput
- 2. flexlid® concept allows use of a variety of consumables with automatic height adjustment of the lid
- 3. Universal block for ultimate flexibility
- 4. Available with gradient
- 5. Intuitive graphic programming
- 6. E-mail notification
- 7. Power saving stand-by mode
- 8. Small footprint to optimize lab space



Description

The Mastercycler nexus X2 gives you the ability to run two totally independent protocols at the same time. Smaller assays fit nicely on the 32-well-block — larger assays can exceed 48 samples and run on the 64-well-block. The larger block is available with gradient function.

As every member of the Mastercycler nexus family, the Mastercycler nexus X2 can be combined with any two Mastercycler nexus eco units for a network of up to three units. In combination with Eppendorf’s PCR Tubes, PCR Strips or divisible plates, the Mastercycler nexus X2 will give you consistent and publishable results — everytime!

Applications

- > Standard PCR
- > Cycle sequencing
- > Optimizing PCR reactions

Combine, Connect, Control

- > Combine up to 3 units for ultimate throughput!
- > Connect your Mastercycler nexus to your computer network and get notified by e-mail when the protocol is complete!
- > Control the parameters of your PCR through the intuitive software

Product features

- > Large block for large assays — small block for small assays
- > Intuitive graphic programming
- > Universal block for strips, 0.1 mL, 0.2 mL and 0.5 mL PCR tubes
- > Small footprint
- > Optional gradient for PCR optimization
- > E-mail notification
- > flexlid concept allows use of all types of consumables with automatic height adjustment of the lid

i For more information go to www.eppendorf.com/Mastercycler



Mastercycler® nexus X2

Technical specifications				
Model	MC nexus GX2	MC nexus GX2e	MC nexus X2	MC nexus X2e
Intuitive graphic programming	■	■	■	■
E-mail Notification	■	■	■	■
Sample capacity	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes	64/32 × 0.2 mL PCR tubes or up to 64 × 0.5 mL PCR tubes
flexlid® concept	■	■	■	■
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
2 years warranty	■	■	■	■
Temperature control mode	Fast, Standard, Safe	Fast, Standard, Safe	Fast, Standard, Safe	Fast, Standard, Safe
Heating technology of the block	Peltier elements, Triple Circuit Technology	Peltier elements, Triple Circuit Technology	Peltier elements, Triple Circuit Technology	Peltier elements, Triple Circuit Technology
Universal Block for 0.2 mL and 0.5 mL vessels	■	■	■	■
Gradient range	1 – 12 °C	1 – 12 °C	–	–
Gradient block	■	■	–	–
Gradient temperature range	30 – 99 °C	30 – 99 °C	–	–
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Unit can control 2 other units in network	■	–	■	–
Unit can only be controlled ¹⁾		■	–	■
Lid descent and closing pressure	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
USB port	■	–	■	
Block homogeneity 20–72 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C
Heating rate	3 °C/s ²⁾	3 °C/s ²⁾	3 °C/s ²⁾	3 °C/s ²⁾
Cooling rate	2 °C/s ²⁾	2 °C/s ²⁾	2 °C/s ²⁾	2 °C/s ²⁾
Gradient block	Over 8 rows	Over 8 rows		
Interfaces	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet
Total weight	24.2 lb / 11 kg	24.2 lb / 11 kg	24.2 lb / 11 kg	24.2 lb / 11 kg
Max. power consumption	540 W	540 W	700 W	700 W
Dimensions (W × D × H)	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm
Thermoblock	Aluminum	Aluminum	Aluminum	Aluminum
Number of programs on device	> 700	> 700	> 700	> 700

¹⁾ Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus GX1, Mastercycler® nexus X1 or Mastercycler® nexus flat²⁾ measured at the block



Large block for large assays, small block for small assays.



Ordering information		
Description	Catalog No.	List USD
Mastercycler® nexus GX2, 110 V/50 – 60 Hz	6336000023	\$9,250.00
Mastercycler® nexus GX2e, 110 V/50 – 60 Hz	6338000020	7,500.00
Mastercycler® nexus X2, 110 V/50 – 60 Hz	6337000027	8,400.00
Mastercycler® nexus X2e, 110 V/50 – 60 Hz	6339000024	6,500.00

i For more information go to www.eppendorf.com/Mastercycler



Mastercycler® nexus



- 1. Available with optional 12-column gradient technology
- 2. flexlid® concept allows use of various types of consumables with automatic height adjustment of the lid
- 3. Universal block for ultimate flexibility
- 4. Connect up to 2 Mastercycler nexus eco units to your existing unit
- 5. Intuitive graphic programming
- 6. E-mail notification
- 7. Power saving stand-by mode
- 8. Small footprint

Description
In the age of networking, the Mastercycler nexus is your reliable companion when it comes to the daily routine of PCR. It is easy to use, doesn't require much space or energy and sends you an e-mail when it is done – what else do you need from a PCR cycler?

- Product features**
- > Intuitive graphic programming
 - > Small footprint
 - > Universal block for ultimate flexibility
 - > Connect up to 2 Mastercycler nexus eco to your existing unit for maximum throughput
 - > Available with optional gradient 12-column gradient technology
 - > E-mail notification
 - > flexlid concept allows use of all types of consumables with automatic height adjustment of the lid

i For more information go to www.eppendorf.com/Mastercycler



- Applications
- > Standard PCR
 - > Cycle sequencing
 - > Fast PCR
 - > Optimizing PCR reactions
 - > *In situ* PCR

- Combine, Connect, Control**
- > Combine up to 3 units for ultimate throughput!
 - > Connect your Mastercycler nexus to your computer network and get a status e-mail to your desk!
 - > Control all the relevant parameters of your PCR with intuitive software



Ordering information		
Description	Catalog No.	List USD
Mastercycler® nexus GSX1, 110 V/50 – 60 Hz	6345000028	\$9,340.00
Mastercycler® nexus SX1, 110 V/50 – 60 Hz	6346000021	8,120.00
Mastercycler® nexus GSX1e, 110 V/50 – 60 Hz	6347000025	7,670.00
Mastercycler® nexus SX1e, 110 V/50 – 60 Hz	6348000029	6,340.00
Mastercycler® nexus gradient, 110 V/50 – 60 Hz (US)	6331000025	8,190.00
Mastercycler® nexus, 110 V/50 – 60 Hz (US)	6333000022	7,280.00
Mastercycler® nexus gradient eco, 110 V/50 – 60 Hz	6334000026	7,000.00
Mastercycler® nexus eco, 110 V/50 – 60 Hz (US)	6332000029	5,510.00
Mastercycler® nexus flat, 110 V/50 – 60 Hz (US)	6335000020	7,480.00
Mastercycler® nexus flat eco, 110 V/50 – 60 Hz	6330000021	6,230.00
CAN bus connecting cable, 150 cm	950014016	54.00
CAN bus connecting cable, 50 cm	950014008	44.00
Self-Test Dongle	950030040	320.00



Mastercycler® nexus

Technical specifications					
Model	MC nexus gradient	MC nexus	MC nexus gradient eco	MC nexus eco	MC nexus flat
Intuitive graphic programming	■	■			■
E-mail Notification	■	■	■	■	■
Sample capacity	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes	96 x 0.2 mL PCR tubes, 1 PCR plate 8 x 12 or up to 71 x 0.5 mL PCR tubes	4 slides or other matching consumables
flexlid® concept	■	■	■	■	■
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
2 years warranty	■	■	■	■	■
Temperature control mode	Fast, Standard, Safe	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe
Heating technology of the block	Peltier elements, triple circuit Technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology
Silver block					
Gradient range	1 – 20 °C	–	1 – 20 °C	–	–
Gradient block	■	–	■	–	■
Gradient temperature range	30 – 99 °C	–	30 – 99 °C	–	–
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Unit can control 2 other units in network	■	■			■
Unit can only be controlled ¹⁾			■	■	
Lid descent and closing pressure	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
USB port	■	■			■
Block homogeneity 20–72 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C
Heating rate	3 °C/s ²⁾	3 °C/s ²⁾	3 °C/s ²⁾	3 °C/s ²⁾	3 °C/s ²⁾
Cooling rate	2 °C/s ²⁾	2 °C/s ²⁾	2 °C/s ²⁾	2 °C/s ²⁾	2 °C/s ²⁾
Gradient block	Over 12 columns	–	Over 12 columns (0.2 mL)	–	
Interfaces	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet	CAN_in, CAN_out, Ethernet	CAN_in, CAN_out, Ethernet, USB
Total weight	24 lb / 10.9 kg	24 lb / 10.9 kg	22.9 lb / 10.4 kg	24 lb / 10.9 kg	22.9 lb / 10.4 kg
Power supply	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz
Max. power consumption	700 W	700 W	700 W	700 W	700 W
Dimensions (W x D x H)	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm
Thermoblock	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Number of programs on device	> 700	> 700	> 700	> 700	> 700

¹⁾ Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus GX1, Mastercycler® nexus X1 or Mastercycler® nexus flat²⁾ measured at the block

i For more information go to www.eppendorf.com/Mastercycler

Product appearance, specifications, and/or prices are subject to change without notice.



Technical specifications					
Model	MC nexus flat eco	MC nexus GSX1	MC nexus SX1	MC nexus GSX1e	MC nexus SX1e
Intuitive graphic programming		■	■		
E-mail Notification	■	■	■	■	■
Sample capacity	4 slides or other matching consumables	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12	96 x 0.2 mL PCR vessels, 1 PCR plate 8 x 12
flexlid® concept	■	■	■	■	■
Temperature control range of the block	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C	4 – 99 °C
2 years warranty	■	■	■	■	■
Temperature control mode	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe	Fast, standard, safe
Heating technology of the block	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology	Peltier elements, triple circuit technology
Silver block		■	■	■	■
Gradient range	–	1 – 20 °C	–	1 – 20 °C	–
Gradient block	■	■		■	
Gradient temperature range	–	30 – 99 °C	–	30 – 99 °C	–
Lid temperature range	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C	37 – 110 °C
Unit can control 2 other units in network		■	■		
Unit can only be controlled ¹⁾	■			■	■
Lid descent and closing pressure	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP	flexlid® technology, with TSP
USB port		■	■		
Block homogeneity 20–72 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C	≤ ± 0.3 °C
Block temperature accuracy	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Block homogeneity 90 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C	≤ ± 0.4 °C
Heating rate	3 °C/s ²⁾	5 °C/s ²⁾	5 °C/s ²⁾	5 °C/s ²⁾	5 °C/s ²⁾
Cooling rate	2 °C/s ²⁾	3.5 °C/s ²⁾	3.5 °C/s ²⁾	3.5 °C/s ²⁾	3.5 °C/s ²⁾
Gradient block		Over 12 columns (0.2 mL)		Over 12 columns (0.2 mL)	
Interfaces	CAN_in, CAN_out, Ethernet	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet, USB	CAN_in, CAN_out, Ethernet	CAN_in, CAN_out, Ethernet
Total weight	22.9 lb / 10.4 kg	24 lb / 10.9 kg	24 lb / 10.9 kg	22.9 lb / 10.4 kg	22.9 lb / 10.4 kg
Power supply	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz
Max. power consumption	700 W	540 W	540 W	540 W	540 W
Dimensions (W x D x H)	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm	9.8 x 16.2 x 12.6 in / 25 x 41.2 x 32.1 cm
Thermoblock	Aluminum	Silver	Silver	Silver	Silver
Number of programs on device	> 700	> 700	> 700	> 700	> 700

¹⁾ Control through a Mastercycler® nexus, Mastercycler® nexus gradient, Mastercycler® nexus GX1, Mastercycler® nexus X1 or Mastercycler® nexus flat²⁾ measured at the block

HeatSealer



Description
The Eppendorf HeatSealer S200 offers adjustable sealing temperature, sealing time and plate formats. The large handle allows for high sealing pressures.

- Product features**
- > Hermetic sealing of multiwell plates
 - > Eliminates evaporation in PCR, reducing cross contamination
 - > Seals 96- and 384-well plates
 - > Integrated thermostat prevents overheating
 - > Improved mechanics for even easier sealing
 - > PCR Plate Adapter included

- Applications**
- > Sealing of multiwell plates

Ordering information		
Description	Catalog No.	List USD
HeatSealer S100, 120 V/50 – 60 Hz	5391000010	\$3,070.00
HeatSealer S200, 120 V/50 – 60 Hz	5392000013	4,400.00
Plate Adapter low profile, for HeatSealer S100	5391070018	365.00
Plate Adapter high profile, for HeatSealer S100	5391070034	365.00
96-well-PCR Plate Adapter, for HeatSealer S100	5391070026	365.00
Plate Adapter high profile, for HeatSealer S200	5392070011	365.00
Plate Adapter low profile, for HeatSealer S200	5392070020	365.00
96-well Plate Adapter, for HeatSealer S200	5392070038	365.00
Eppendorf Heat Sealing Film, PCR clean, 100 pcs.	0030127838	210.30
Eppendorf Heat Sealing Foil, PCR clean, 100 pcs.	0030127854	137.80

i For more information go to www.eppendorf.com/pcr

Heat Sealing Film and Foil



- Heat Sealing Film and Foil**
- > Hermetic seal of multiwell plates, especially recommended for low reaction volumes
 - > Best protection against evaporation during PCR
 - > For use with HeatSealer
 - > Heat Sealing film allows for visual monitoring of sample due to transparency and is ideal when plates are being stacked as it prevents accidental piercing
 - > Heat Sealing foil is easily pierced and ideal for automated systems

Ordering information		
Description	Catalog No.	List USD
Eppendorf Heat Sealing Film, PCR clean, 100 pcs.	0030127838	\$210.30
Eppendorf Heat Sealing Foil, PCR clean, 100 pcs.	0030127854	137.80



Eppendorf twin.tec® PCR Plates

Description

Eppendorf twin.tec PCR plates combine two plastics to make the ideal PCR plate for all laboratory needs. The polycarbonate frame provides rigidity and torque-resistance for easy handling and use with automated systems. The robust frame also prevents plate warping during thermal cycling thereby reducing the risk of evaporation. The polypropylene wells are very thin-walled, providing optimal heat transfer and high well-to-well consistency during your thermal cycling protocols.

Product features

- > Thin-walled polypropylene wells guarantee optimal heat transfer
- > Rigid polycarbonate frame ensures outstanding torsion resistance making it perfect for automated processes
- > Raised well rims for effective and contamination-free closure
- > Fully autoclavable (121 °C)
- > Certified PCR Clean—free of human DNA, DNase, RNase, and PCR inhibitors



Eppendorf twin.tec® PCR Plate 96, skirted

- > Full skirt design makes it perfect for automated workflows
- > Perfect for standard PCR and qPCR applications
- > Clear wells enable easy sample visualization
- > Within SBS footprint recommendations (127.76 × 85.47 mm ± 0.25 mm)
- > 150 µL maximum well capacity (when used with cap strips)
- > Low profile (150 µL) design enables low volume PCR
- > Stackable while in use for space-saving during storage or automated workflows
- > Barcode options available. For more information please visit www.eppendorf.com/barcode

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® PCR Plate 96, skirted, 150 µL		
colorless, 25 pcs. (5 bags x 5 plates)	951020401	\$116.40
yellow, 25 pcs. (5 bags x 5 plates)	951020427	116.40
green, 25 pcs. (5 bags x 5 plates)	951020443	116.40
blue, 25 pcs. (5 bags x 5 plates)	951020460	116.40
red, 25 pcs. (5 bags x 5 plates)	951020486	116.40



Eppendorf twin.tec® PCR Plate 96, semi-skirted

- > Semi-skirted design makes it ideal for automated workflows
- > Perfect for standard PCR and qPCR applications
- > Within SBS footprint recommendations (127.76 × 85.47 mm ± 0.25 mm)
- > 250 µL maximum well capacity (when used with cap strips)
- > Barcode options available. For more information please visit www.eppendorf.com/barcode

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® PCR Plate 96, semi-skirted, 250 µL		
colorless, 25 pcs. (5 bags x 5 plates)	951020303	\$116.40
yellow, 25 pcs. (5 bags x 5 plates)	951020320	116.40
green, 25 pcs. (5 bags x 5 plates)	951020346	116.40
blue, 25 pcs. (5 bags x 5 plates)	951020362	116.40
red, 25 pcs. (5 bags x 5 plates)	951020389	116.40

Product appearance, specifications, and/or prices are subject to change without notice.



Eppendorf twin.tec® PCR Plates



Eppendorf twin.tec® PCR Plate 96, unskirted

- > Fits most common standard and real-time/quantitative PCR thermal cyclers
- > Available in regular (250 µL) and low profile (150 µL) well capacity (when used with cap strips) for enhanced thermal cycler compatibility and reaction volume flexibility
- > Low profile (150 µL) design enables low volume PCR
- > Perfect for standard PCR and qPCR applications

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® PCR Plate 96, low profile, unskirted, 150 µL		
colorless, 20 pcs. (4 bags x 5 plates)	0030133307	\$85.76
blue, 20 pcs. (4 bags x 5 plates)	0030133331	85.76
Eppendorf twin.tec® PCR Plate 96, unskirted, 250 µL		
colorless, 20 pcs. (4 bags x 5 plates)	0030133366	85.76
blue, 20 pcs. (4 bags x 5 plates)	0030133390	85.76



Eppendorf twin.tec® PCR Plate 96, unskirted, divisible

- > Can be divided into 4 segments of 24 wells for convenience and reduction of wasted or unused wells
- > All the benefits of a twin.tec plate for smaller sample sizes
- > Fits most common standard and real-time/quantitative PCR thermal cyclers
- > Available in regular (250 µL) and low profile (150 µL) well capacity (when used with cap strips) for enhanced thermal cycler compatibility and reaction volume flexibility
- > Low profile (150 µL) design enables low volume PCR
- > Perfect for standard PCR and qPCR applications

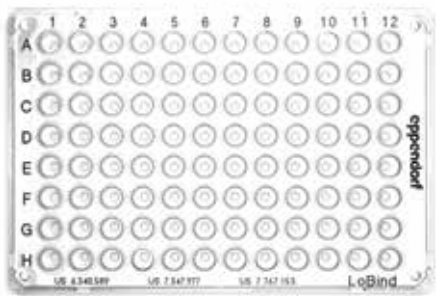
Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® PCR Plate 96, divisible, low profile, unskirted, 150 µL		
colorless, 20 pcs. (4 bags x 5 plates)	0030133358	\$170.51
blue, 20 pcs. (4 bags x 5 plates)	0030133382	170.51
Eppendorf twin.tec® PCR Plate 96, divisible, unskirted, 250 µL		
colorless, 20 pcs. (4 bags x 5 plates)	0030133374	170.51
blue, 20 pcs. (4 bags x 5 plates)	0030133404	170.51

i For more information go to www.eppendorf.com/Twintec



Eppendorf twin.tec® PCR Plates



Eppendorf twin.tec® PCR Plate 96, LoBind

- > LoBind properties reduce adsorption of DNA and protein to the plate to maximize your amplification results
- > Full skirt or Semi-skirt makes this plate ideal for automated workflows
- > Perfect for standard PCR applications, qPCR applications, NGS workflows, and other applications involving precious samples
- > Within SBS footprint recommendations (127.76 × 85.47 mm ± 0.25 mm)
- > Barcode options available. For more information please visit www.eppendorf.com/barcode

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec PCR Plates 96 LoBind, skirted, colorless, 25 pcs.	0030129512	\$126.60
Eppendorf twin.tec PCR Plates 96 LoBind, semi-skirted, colorless, 25 pcs.	0030129504	126.60



Eppendorf twin.tec® microbiology PCR Plate

- > In addition to being certified PCR clean, these plates are also sterile, bacterial DNA-free and individually blistered for all applications that require utmost purity and certified absence of microbiological contaminations
- > Perfect for labs studying the microbiome and other microbiological applications
- > Within SBS footprint recommendations (127.76 × 85.47 mm ± 0.25 mm)
- > Available in both 96-well and 384-well options for easy scale-up
- > Barcode options available. For more information please visit www.eppendorf.com/barcode

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® microbiology PCR Plate 96, skirted, 150 µL		
colorless, 10 pcs. individually wrapped	0030129300	\$ 85.80
blue, 10 pcs. individually wrapped	0030129318	85.80
Eppendorf twin.tec® microbiology PCR Plate 96, semi-skirted, 250 µL		
colorless, 10 pcs. individually wrapped	0030129326	85.80
blue, 10 pcs. individually wrapped	0030129334	85.80
Eppendorf twin.tec® microbiology PCR plate 384, 40 µL		
colorless, 10 pcs. individually wrapped	0030129342	126.60
blue, 10 pcs. individually wrapped	0030129350	126.60



Eppendorf twin.tec® PCR Plates



Eppendorf twin.tec® PCR Plate 384

- > Ideal for most common 384-well thermal cyclers
- > 40 µL maximum well capacity
- > Within SBS footprint recommendations (127.76 × 85.47 mm ± 0.25 mm)
- > Ideal for high throughput PCR, low-volume PCR and qPCR applications
- > Barcode options available. For more information please visit www.eppendorf.com/barcode

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® PCR Plate 384, 40 µL		
colorless, 25 pcs. (5 bags x 5 plates)	951020702	\$226.70
yellow, 25 pcs. (5 bags x 5 plates)	951020711	226.70
green, 25 pcs. (5 bags x 5 plates)	951020729	226.70
blue, 25 pcs. (5 bags x 5 plates)	951020737	226.70
red, 25 pcs. (5 bags x 5 plates)	951020745	226.70



Eppendorf twin.tec® *real-time* PCR Plates



Eppendorf twin.tec® *real-time* PCR Plates

- > General product features of the Eppendorf twin.tec plate hold true for the Eppendorf real-time PCR plates (page 286)
- > White wells enhance the fluorescence signal while eliminating the risk of well-to-well cross-talk
- > Ideal for qPCR applications and melting curve analysis
- > Available 96-well skirted, semi-skirted, and unskirted twin.tec variants as well as 384-well for easy scale-up or higher throughput applications
- > Barcoding available with 96-well skirted, 96-well semi-skirted and 384 well plates. For more information please visit www.eppendorf.com/barcode

Ordering information

Description	Catalog No.	List USD
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate, skirted, 150 µL		
blue, 25 pcs. (5 bags x 5 plates)	951022003	\$165.40
white, 25 pcs. (5 bags x 5 plates)	951022015	165.40
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate, semi-skirted, 250 µL		
blue, 25 pcs. (5 bags x 5 plates)	951022043	165.40
white, 25 pcs. (5 bags x 5 plates)	951022055	165.40
Eppendorf twin.tec® 96 <i>real-time</i> PCR Plate, low profile, unskirted, 150 µL		
blue, 20 pcs. (5 bags x 5 plates)	0030132718	101.60
white, 20 pcs. (5 bags x 5 plates)	0030132700	101.60
Eppendorf twin.tec® 384 <i>real-time</i> PCR Plate, 40 µL		
blue, 20 pcs. (5 bags x 5 plates)	0030132742	256.30
white, 20 pcs. (5 bags x 5 plates)	0030132734	256.30

i For more information go to www.eppendorf.com/Realtime

Product appearance, specifications, and/or prices are subject to change without notice.



Eppendorf PCR Tube Strips



Eppendorf PCR Tube Strips, 0.1 mL

- > 8 reaction tubes in a strip format make these ideal for smaller sample volumes
- > Extremely thin walls for optimal heat transfer
- > Sealable using either flat or domed cap strips
- > Certified PCR clean - free from human DNA, DNase, RNase, and PCR inhibitors
- > Fits most standard PCR thermal cyclers

Ordering information

Description	Catalog No.	List USD
Eppendorf PCR Tube Strip, 0.1 mL		
without lids (10 bags x 12 strips)	0030124804	\$128.70
with Cap Strips, domed (10 bags x 12 strips)	0030124812	190.90
with Cap Strips, flat (10 bags x 12 strips)	0030124820	198.10
Cap strips, 8 microcap strip		
domed, 120 pcs. (10 bags x 12 cap strips)	0030124839	73.51
flat, 120 pcs. (10 bags x 12 cap strips)	0030124847	80.70



Eppendorf PCR Tube Strips, 0.2 mL

- > Contamination shield on the attached, hinged lid
- > Lid position is defined due to the hinge which enables easier handling and assay set-up
- > Extremely thin walls for optimal heat transfer
- > Tight lid seal to eliminate risk of evaporation during assay
- > For use with all thermal cyclers with a standard 0.2 mL block format
- > Certified PCR Clean - free from human DNA, DNase, RNase, and PCR inhibitors

Ordering information

Description	Catalog No.	List USD
Eppendorf PCR Tubes, 0.2 mL, with doomed lid, clear, 120 pcs. (10 bags x 12 tube strips)	951010022	\$201.10

i For more information go to www.eppendorf.com/pcr



Masterclear® Cap Strips and *real-time* PCR Tube Strips



Masterclear® Cap Strips and *real-time* PCR Tube Strips

real-time PCR Tube Strips

- > White wells enhance the fluorescence signal while eliminating the risk of well-to-well cross-talk
- > High mechanical stability
- > Extremely thin walls for optimal heat transfer
- > Certified PCR Clean – free from human DNA, DNase, RNase, and PCR inhibitors

Masterclear Cap Strips

- > Inverted dome to avoid scratching of the optic surface
- > Inverted dome reduces total volume of the tube, bringing the optical surface closer to your sample for more accurate signal transmission
- > Optimized for maximum light transmission
- > Certified PCR Clean – free from human DNA, DNase, RNase, and PCR inhibitors

Ordering information

Description	Catalog No.	List USD
<i>real-time</i> PCR Tube Strips , without caps		
120 pcs. (10 bags x 12 tube strips)	951022102	\$170.50
Masterclear Cap Strips and <i>real-time</i> PCR Tube Strips		
120 pcs. (10 bags x 12 tube strips)	951022109	266.50
Masterclear Cap Strips		
120 pcs. (10 bags x 12 tube strips)	951022089	99.50

Cap Strips



Cap Strips

- > Strips with 8 microcaps for 0.1 and 0.2 mL wells
- > Easy and rapid sealing of Eppendorf twin.tec PCR plates, PCR tube strips and other standard multiwell plates
- > Flat caps are suitable for qPCR applications
- > Fully autoclavable
- > Certified PCR Clean – free from human DNA, DNase, RNase, and PCR inhibitors

Ordering information

Description	Catalog No.	List USD
Cap Strips , 8-strips		
domed, 120 pcs. (10 bags x 12 cap strips)	0030124839	\$73.51
flat, 120 pcs. (10 bags x 12 cap strips)	0030124847	80.70

i For more information go to www.eppendorf.com/pcr



Eppendorf PCR Tubes



Eppendorf PCR Tubes

- > Tight lid seal to eliminate risk of evaporation during assay
- > Available in 0.2 mL and 0.5 mL formats
- > 0.2 mL tube has a hinged lid and contamination shield
- > For use with all thermal cyclers with a standard 0.2 mL (0.2 mL tube) or 0.5 mL (0.5 mL tube) block format
- > Extremely thin walls for optimal heat transfer
- > Certified PCR Clean – free from human DNA, DNase, RNase, and PCR inhibitors

Ordering information

Description	Catalog No.	List USD
Eppendorf PCR Tubes , 0.2 mL, with domed lid, clear, 1,000 individual pcs.	951010006	\$148.10
Eppendorf PCR Tubes , 0.5 mL, with flat lid, clear, 500 individual pcs.	0030124537	73.50

Heat Sealing Film and Foil



Heat Sealing Film and Foil

- > Hermetic seal of multiwell plates, especially recommended for low reaction volumes
- > Best protection against evaporation during PCR
- > For use with HeatSealer
- > Heat Sealing film allows for visual monitoring of sample due to transparency and is ideal when plates are being stacked as it prevents accidental piercing
- > Heat Sealing foil is easily pierced and ideal for automated systems

Ordering information

Description	Catalog No.	List USD
Eppendorf Heat Sealing Film , PCR clean, 100 pcs.	0030127838	\$210.30
Eppendorf Heat Sealing Foil , PCR clean, 100 pcs.	0030127854	137.80

i For more information go to www.eppendorf.com/pcr

PCR Film and Foil (self-adhesive)



Self-adhesive PCR Film and Foil

- > Effective adhesive sealing prevents evaporation and sample loss during PCR
- > Easily removable from the plate without leaving behind any unwanted residue that could cause sample contamination
- > PCR film allows for visual monitoring of sample due to transparency
- > PCR foil is easily pierced and ideal for automated systems

Ordering information

Description	Catalog No.	List USD
Eppendorf PCR Film, self-adhesive, PCR clean, 100 pcs.	0030127781	\$203.10
Eppendorf PCR Foil, self-adhesive, PCR clean, 100 pcs.	0030127790	186.80

Masterclear® *real-time* PCR Film



Self-adhesive Masterclear® *real-time* PCR Film

- > Optimized optical clarity for maximum signal transmission
- > Effective adhesive sealing prevents evaporation and sample loss during PCR
- > For use with multiwell plates during qPCR applications

Ordering information

Description	Catalog No.	List USD
Masterclear® <i>real-time</i> PCR Film, self-adhesive, PCR clean, 100 pcs.	0030132947	\$265.50

i For more information go to www.eppendorf.com/pcr

PCR Rack



PCR Rack

- > Rack for handling and storing tubes and plates
- > For 0.1 mL, 0.2 mL and 0.5 mL tubes, as well as 96-well plates
- > Stackable
- > Can be stored down to –90°C
- > Autoclavable (121 °C, 20 min)

Ordering information

Description	Catalog No.	List USD
PCR Rack, 10 pcs.	951010065	\$203.10



Mastercycler® Performance Plans

Value of Service

A 2 year warranty comes with all Mastercyclers. Choose an Extended Warranty, Essential Check, Advanced Maintenance, Premium Service, Flat Fee Repair Service, or Certification Services to ensure optimal performance of your instrument and to keep your system running smoothly for years to come.

Extended Warranty

Your new Eppendorf Mastercycler comes with a 2 year warranty which covers all parts and labor should the system ever need repair. We offer an extended warranty plan to protect your investment after the included warranty period. Most systems are returned to our Service Center for repair and Field Service may be available with a travel zone charge. Service travel applies only to Mastercycler in select markets, not applicable for ep *realplex*.

1-year Extended Warranty	Catalog No.	List USD
Mastercycler systems	901510550	\$1,000.00
Mastercycler ep <i>realplex</i> systems	950020928	3,200.00

Essential Check

An essential check of your Mastercycler allows for reliable system operating at peak performance over the instruments lifetime. This includes a visual check of the housing, check of the display, thermoblock, heated lid and fan. A check list is provided for documentation. Service travel applies only to Mastercycler in select markets, not applicable for ep *realplex*.

Essential Check	Catalog No.	List USD
Mastercycler systems	0082040043	\$ 425.00
Mastercycler ep <i>realplex</i> systems	6302000120	1,000.00

Advanced Maintenance

A one-time service event to ensure your Mastercycler operates at peak performance over the instrument’s lifetime. This includes a visual check of the housing and electrical connections, cleaning of the internal and external parts, check of the USB port, display, thermoblock, heated lid and fan. The temperature will be verified and calibrated if required. Where applicable the following services are also included: software update, background calibration and color calibration of *realplex* module. A check list is provided for documentation. Service travel applies only to Mastercycler in select markets, not applicable for ep *realplex*.

Advanced Maintenance	Catalog No.	List USD
Mastercycler systems	0082040044	\$ 617.00
Mastercycler ep <i>realplex</i> systems	6302000138	1,400.00

Flat Fee Repair Service

A valued Service Center option is essential when a repair is needed for a system not covered under a warranty or extended warranty. For a single fee we will repair the instrument, complete a full preventive maintenance, repair any issues that may be found and include a full year warranty on the entire instrument. The instrument return shipment is also included.

Flat Fee Repair Service	Catalog No.	List USD
Mastercycler systems	901513429	\$2,800.00
Mastercycler ep <i>realplex</i> systems	901520069	7,500.00

Premium Service

This comprehensive service includes a visual check of the housing and electrical connections, cleaning of the internal and external parts, check of the USB port, display, thermoblock, heated lid and fan. The temperature will be verified and calibrated if required. Where applicable the following services are also included: software update, background calibration and color calibration of *realplex* module. A check list is provided for documentation. Quality-tested Eppendorf original spare parts will be exchanged when necessary. Premium service includes the cost of parts, labor, loaner instrument and case, and shipping or service travel for any repair on the instrument. Service travel applies only to Mastercycler in select markets, not applicable for ep *realplex*.

Premium Service	Catalog No.	List USD
Mastercycler systems	0082040045	\$4,250.00
Mastercycler ep <i>realplex</i> systems	6302000146	6,000.00

Certification Services

IQ—includes installation for optimal performance and reliability. This includes checking the condition of delivery packaging and the unpacked instrument, instrument set-up and initial operation. The temperature will be verified upon installation. Documentation includes IQ report and certificate. **OQ**—includes visual inspection of display and system testing. Where applicable the following services are also included: checking leak tightness, analyzing error statistics, motor module testing and exchange of oil. The temperature will be verified. Documentation includes OQ report and certificate. Service travel applies only to Mastercycler in select markets, not applicable for ep *realplex*.

Installation Qualification	Catalog No.	List USD
Mastercycler systems	0082040047	\$ 900.00
Operation Qualification		
Mastercycler systems	0082040048	600.00
IQ/OQ		
Mastercycler systems	0082040049	1,117.00





Freezer

Instruments

Page

Space Saving Innova® Freezers—Innova freezers provide up to 30% more storage capacity by utilizing advanced vacuum insulation panel technology providing smaller chamber walls and better insulation	New Brunswick™ Innova U101	304
	New Brunswick Innova U360	305
	New Brunswick Innova U535	306
	New Brunswick Innova U725	307
	New Brunswick Innova C585	308
	New Brunswick Innova C760	309
Traditional Premium Freezers—Premium freezers offer traditional foam insulation providing an economical solution without compromising quality	New Brunswick Premium U410	311
	New Brunswick Premium U700	312
High Efficiency HEF® Freezers—High efficiency freezers have additional design features that further reduce energy consumption by up to 59%, making them among the most energy efficient on the market	New Brunswick HEF U410	314
The CryoCube Ultra-low Temperature Freezers from Eppendorf combine maximum sample security with increased energy efficiency into a brand new look	CryoCube F570h	318
	CryoCube FC660h	319
	CryoCube F570	316
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Accessories—A wide array of freezer accessories are offered to ensure sample security, enable data monitoring and maximize storage capacity		
	Freezer racks	321
	Freezer Cardboard Storage Boxes	323
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	Eppendorf Tubes® 5.0 mL	324
	Eppendorf CO ₂ and LN ₂ Back-up Systems	324
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i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Environmentally friendly and energy efficient.

Ultra-low temperature freezers traditionally consume a large amount of energy, as they maintain extremely low temperatures 24/7. With today’s high energy costs and focus on the environment, energy conservation has become even more important in the lab. Eco-friendly New Brunswick ULT freezers are designed to help you save energy without compromising sample security.

New Brunswick freezers reduce energy consumption by thousands of kilowatt hours when compared to comparable competitor models of similar size. The net effect of using a New Brunswick freezer compared to other manufacturer freezer models result in an average reduction of 28.2 tons of CO₂ emissions, an average of over 40% savings in annual energy costs.



- > A highly efficient compressor control system reduces cycling times to lower energy consumption and increase freezer longevity
- > Low noise levels and heat output to benefit your work environment
- > High-quality insulation materials and gaskets provide ultimate temperature control and optimized energy efficiency
- > Environmentally safe, HCFC-free and CFC-free refrigerants minimize greenhouse gases
- > Biodegradable and commercially-available, high-performance, synthetic compressor lubricants prevent “oil-logging”
- > A single, quiet, condenser fan reduces energy consumption; compared to most freezers that require two
- > Built with 95–98% recyclable materials (by weight)
- > Meets WEEE directives for disposal



Selection guide

Innova® Freezers



Style		Upright	Upright	Upright	Upright	Chest	Chest
Model No.		U101	U360	U535	U725	C585	C760
Capacity (ft³)		3.6	12.7	18.9	25.6	20.7	26.9
Catalog No.	120 V, 60 Hz	U9420-0000	U9425-0000	U9430-0000	—	U9400-0000	—
	208–230 V, 60 Hz	—	—	U9430-0002	U9440-0002	U9400-0002	U9410-0002
Plug provided (white); Outlet required (black) 120 V				 			
208–230 V							
Capacity	Overall	101 L	360 L	535 L	725 L	585 L	760 L
	Compartments	2	3	3	3	—	—
	Racks per shelf	3	3	4	6	—	—
	Racks per freezer	6	9	12	18	32	44
	Box capacity per rack	2 in (50 mm) box (H)	10	28	28	13	13
		3 in (75 mm) box (H)	6	20	20	9	9
		4 in (100 mm) box (H)	4	12	12	6	6
	Box capacity per freezer	2 in (50 mm) box (H)	60	252	336	504	416
		3 in (75 mm) box (H)	36	180	240	360	288
		4 in (100 mm) box (H)	24	108	144	216	192
	Sample capacity per freezer	2 in (50 mm) box (H)	6,000	25,200	33,600	50,400	41,600
		3 in (75 mm) box (H)	3,600	18,000	24,000	36,000	28,800
		4 in (100 mm) box (H)	2,400	10,800	14,400	21,600	19,200
Performance	Pull down to –85°C (Hours)²	120 V, 60 Hz	3.5	5	5.3	—	4.3
		208–230 V, 60 Hz	—	—	5.3	5.2	4.3
	Noise level (dB)	120 V, 60 Hz	54	54	56	—	56
		208–230 V, 60 Hz	—	—	56	59	56
	Heat output (watts)	120 V, 60 Hz	344	623	720	—	700
		208–230 V, 60 Hz	—	—	720	750	700
Power	Electric / Mains (A) / Full load amp draw	120 V, 60 Hz	13	16.5	16.5	—	16.5
		208–230 V, 60 Hz	—	—	9	10	9
	kWh per day¹	120 V, 60 Hz	6.4	11.7	13.2	—	13.9
Dimensions³	External	208–230 V, 60 Hz	—	—	13.2	16.4	13.9
							16.8
		Height (in)	32.7	76.8	76.8	76.8	43
	Internal	Width (in)	35.4	26.4	31.5	40.4	66.5
		Depth (in)	22.3	34.1	34.1	34.1	30.9
		Height (in)	25.2	53.7	53.7	53.7	30.7
		Width (in)	18.9	17.3	25.2	34.1	97.2
Compartment Heights	Top (in)	12.6	16.57	16.57	16.57	—	—
	Middle (in)		16.73	16.73	16.73	—	—
	Bottom (in)	12.4	16.73	16.73	16.73	—	—
Weight	Net weight (lbs)	256	507	551	693	528	627
	Shipping weight (lbs)	330	529	656	799	656	732

¹ Empty freezer with shelves fitted (upright freezers only), set point –80°C, 22–26°C ambient conditions. ² Empty freezer with shelves fitted (upright freezers only), pull down from –26°C ambient conditions. ³ Optional CO₂/LN₂ back-up systems add 8.65 cm (3.4 in) to height.

Product appearance, specifications, and/or prices are subject to change without notice.



Premium Freezers

High Efficiency Freezers

CryoCube® Freezers



Upright	Upright	Upright	Upright	Chest	Upright	Chest
U410	U700	HEF U410	F570h	FC660h	F570	FC660
14.5	25.0	14.5	20.0	23.3	20	23.3
U9260-0000	U9280-0000	U9260-0007	F570220005	—	F570200005	—
U9260-0002	U9280-0002	—	—	F660420005	F570400005	F660400005
410 L	700 L	410 L	570 L	660 L	570 L	660 L
5	5	5	5	—	5	—
3	6	3	5	—	5	—
15	30	15	25	40	25	40
16	16	16	16	13	16	13
12	12	12	12	9	12	9
8	8	8	8	6	8	6
240	480	240	400	520	400	520
180	360	180	300	360	300	360
120	240	120	200	240	200	240
24,000	48,000	24,000	40,000	52,000	40,000	52,000
18,000	36,000	18,000	30,000	36,000	30,000	36,000
12,000	24,000	12,000	20,000	24,000	20,000	24,000
4.1	5.9	5.8	4.9	—	4.7	—
4.1	4.8	—	—	4.7	4.7	4.8
57	61	57	58.8	—	59.7	—
57	61	—	—	60.1	58.8	58.5
600	755	525	392	—	500	—
600	755	—	—	396	479	454
16.5	13	16.5	16.5	—	16.5	—
8	8	—	—	8	6.5	8
13	15.9	8.6	9.4	—	12.0	—
13	15.9	—	—	9.5	11.5	10.9
75.3	77.1	75.3	76.4	42.9	76.4	42.9
31.5	44.1	31.5	40.4	81.5	40.4	81.5
33.5	34.3	33.5	33.5	33.3	33.5	33.3
49.8	51.8	49.8	49.8	30	49.8	30
21.6	34.1	21.6	30.1	57.9	30.1	57.9
22.6	24.1	22.6	22.6	23.2	22.6	23.2
9.84	9.8	9.84	9.84	—	9.84	—
9.45	10.43	9.45	9.45	—	9.45	—
9.45	10.37	9.45	9.45	—	9.45	—
518	615	518	653	670	595	617
623	820	623	752	776	695	723

New Brunswick™ Innova® Upright Freezers



- 1. Inner doors in upright models are gasketed and insulated, creating three separate compartments to minimize cold air loss
- 2. Provides 30% more storage capacity than freezers of equal size
- 3. Unique Innova U101 and U360 provide a convenient and space-saving solution
- 4. Advanced lock and alarm features for improved sample security
- 5. Unique heated air vent with plunger to clear ice buildup and release vacuum formation providing immediate access to the freezer
- 6. Flat, frost resistant gaskets on outer door on all upright and chest models reduce cold air loss and allow for rapid temperature recovery
- 7. Built-in voltage stabilizer on U535, U725, C585 and C760 freezers provides extra sample security
- 8. Quick pull down and recovery times with reliable and efficient heavy duty compressors

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.

New Brunswick™ Innova® Freezers



Description
When it comes to maximizing sample storage capacity, Innova Freezers set the standard. They take advantage of ultra-efficient, ultra-compact Vacuum Insulation Panels, which are used in combination with traditional insulation to slim down the freezer wall thickness from 130 mm to 80 mm. These models are ideal for labs short on space. Six models are offered, U101, U360, U725, U535, C585 and C760.



New Brunswick™ Innova® U101



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	3.6 ft³/101 L
Pull down to -85°C (hours) ¹	3.5
Power supply	120 V/60 Hz
Power consumption	6.4 kWh/day
Number of compartments	2
Number of shelves	1
Racks per freezer	6
Boxes per freezer	
2 in (5 cm) tall boxes	60
3 in (7.5 cm) tall boxes	36
4 in (10 cm) tall boxes	24
Noise level (dB)	54
Internal dimensions (W x D x H)	18.9 x 13 x 25.2 in/ 48 x 33 x 64 cm
External dimensions (W x D x H) ^{2,3,4}	35.4 x 22.3 x 32.7 in / 90 x 56.6 x 83 cm
Weight w/o accessories	256 lbs/116 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description

Keep your samples safe, secure and easily accessible with the space saving Innova U101. This unique, personal sized upright freezer packs all of the features of our full uprights into one small package. The U101 fits easily on or under your lab bench. For added storage space, an additional U101 can be stacked on top of one another, doubling the capacity while utilizing the same floor space. Engineered with optimal air flow in mind, this unit can be placed flush against a wall without risk of overheating.

Product features

- > Capacity: 101 L
- > Small footprint occupying only 5.4 ft² of floor space
- > Holds up to 6,000 samples
- > Under the counter design for immediate access to personal samples and for labs tight on space
- > Stackable 2 units high with stacking kit (sold separately, not included)
- > Vacuum insulation paneling reduces footprint by 30%
- > Doors that are insulated, gasketed, and removable
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy to use control panel
- > High-quality stainless steel interior and shelves are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor, and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova U101, 101 L, under the counter upright, 120 V/60 Hz	U9420-0000	\$11,235.00
Upright freezer rack, Innova U101		
2 in (5 cm) tall box, 10 boxes per rack	K0641-3003	183.00
3 in (7.5 cm) tall box, 6 boxes per rack	K0641-3004	183.00
4 in (10 cm) tall box, 4 boxes per rack	K0641-3005	183.00
New Brunswick Innova CO ₂ back-up system, 120–220 V, 60 Hz ⁵	U9043-0002	1,695.00
New Brunswick Innova LN ₂ back-up system, 120–220 V, 60 Hz ⁵	U9044-0002	1,695.00
U101 stacking kit	P0625-0020	315.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



New Brunswick™ Innova® U360



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	12.7 ft³/360 L
Pull down to -85°C (hours) ¹	5
Power supply	120 V/60 Hz
Power consumption	11.7
Number of compartments	3
Number of shelves	2
Racks per freezer	9
Boxes per freezer	
2 in (5 cm) tall boxes	252
3 in (7.5 cm) tall boxes	180
4 in (10 cm) tall boxes	108
Noise level (dB)	56
Internal dimensions (W x D x H)	17.3 x 24.2 x 53.7 in/ 44 x 61.5 x 136.5 cm
External dimensions (W x D x H) ^{2,3,4}	26 x 34.1 x 76.8 in/ 67 x 86.7 x 195 cm
Weight w/o accessories	507 lbs/230 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description

The U360 provides an advanced design with sophisticated controls for labs tight on space. Ultra-slim at 67 cm (26.4 in) wide, the U360 is the first of the Innova line to feature our advanced controller with extra-large display and graphing capability. The U360 offers all the quality construction and system advantages as our original Innova models, plus much more.

Product features

- > Capacity: 360 L
- > Small footprint, occupying only 5.8 ft² of floor space
- > Holds up to 25,200 samples
- > Advanced control panel with on-screen messaging and data logging
- > Vacuum insulation paneling reduces footprint by 30%
- > Optional slide in voltage stabilizer
- > Removable, insulated and gasketed inner doors minimize cold air loss
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy to use control panel
- > High-quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor, and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova U360, 360 L, ultra-slim upright, 120 V/60 Hz	U9425-0000	\$15,255.00
Upright freezer rack, Innova U360, U535 and U725		
2 in (5 cm) tall box, 28 boxes per rack	K0641-3000	208.00
3 in (7.5 cm) tall box, 20 boxes per rack	K0641-3001	208.00
4 in (10 cm) tall box, 12 boxes per rack	K0641-3002	208.00
New Brunswick Innova CO ₂ back-up system, 120–220 V/60 Hz ⁵	U9043-0002	1,695.00
New Brunswick Innova LN ₂ back-up system, 120–220 V/60 Hz ⁵	U9044-0002	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.



New Brunswick™ Innova® U535



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	18.9 ft³/535 L
Pull down to -85°C (hours) ¹	5.3
Power supply	120 V/60 Hz 208–220 V/60 Hz
Power consumption	13.2 kWh/day
Number of compartments	3
Number of shelves	2
Racks per freezer	12
Boxes per freezer	
2 in (5 cm) tall boxes	336
3 in (7.5 cm) tall boxes	240
4 in (10 cm) tall boxes	144
Noise level (dB)	56
Internal dimensions (W x D x H)	25.2 x 24.2 x 53.7 in/ 64 x 61.5 x 136.5 cm
External dimensions (W x D x H) ^{2,3,4}	31.5 x 34.1 x 76.8 in/ 80 x 86.7 x 195 cm
Weight w/o accessories	551 lbs/250 kg

¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.

Description

The U535 is a versatile, energy efficient upright freezer that can be placed almost anywhere but still hold a significant number of samples. With the use of vacuum insulated panels, the U535 occupies approximately the same footprint as the traditionally foamed Premium 410 L freezer, but holds over 25% more samples.

Product features

- > Capacity: 535 L
- > Holds up to 33,600 samples
- > Vacuum insulation paneling reduces footprint by 30%
- > Fits through a standard doorway
- > Internal voltage stabilizer
- > Leveling feet and heavy duty castors
- > Removable, insulated and gasketed inner doors minimize cold air loss
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy to use control panel
- > High-quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor, and 5 years all part

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova U535, 535 L, upright, 120 V/60 Hz	U9430-0000	\$15,910.00
New Brunswick Innova U535, 535 L, upright, 208–220 V/60 Hz	U9430-0002	15,910.00
Upright freezer rack, Innova U360, U535 and U725		
2 in (5 cm) tall box, 28 boxes per rack	K0641-3000	208.00
3 in (7.5 cm) tall box, 20 boxes per rack	K0641-3001	208.00
4 in (10 cm) tall box, 12 boxes per rack	K0641-3002	208.00
New Brunswick Innova CO ₂ back-up system, 120–220 V/60 Hz ⁵	U9043-0002	1,695.00
New Brunswick Innova LN ₂ back-up system, 120–220 V/60 Hz ⁵	U9044-0002	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



New Brunswick™ Innova® U725



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	25.6 ft³/725 L
Pull down to -85°C (hours) ¹	5.2
Power supply	208–220 V/60 Hz
Power consumption	16.4 kWh/day
Number of compartments	3
Number of shelves	2
Racks per freezer	18
Boxes per freezer	
2 in (5 cm) tall boxes	504
3 in (7.5 cm) tall boxes	360
4 in (10 cm) tall boxes	216
Noise level (dB)	59
Internal dimensions (W x D x H)	34.1 x 24.2 x 53.7 in/ 86.5 x 61.5 x 136.5 cm
External dimensions (W x D x H) ^{2,3,4}	40.4 x 34.1 x 76.8 in/ 102.5 x 86.7 x 195 cm
Weight w/o accessories	694 lbs/315 kg

¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.

Description

The U725 is the most popular freezer in our lineup, providing the perfect balance of quality, performance, and efficiency in the largest Innova upright freezer we offer. The U725 uses space-saving Vacuum Insulation Panel technology to reduce wall thickness for a 30% increase in storage capacity while also providing efficiency, reliable performance, and fast pull-down and recovery times. This allows the U725 to occupy the same footprint as the traditionally foamed Premium 570 L freezer, but holds over 25% more samples.

Product features

- > Capacity: 725 L
- > Holds up to 50,400 samples
- > Vacuum insulation paneling reduces footprint by 30%
- > Fits through a standard doorway
- > Internal voltage stabilizer
- > Leveling feet and heavy duty castors
- > Removable, insulated and gasketed inner doors minimize cold air loss
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy to use control panel
- > High-quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor, and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova U725, 725 L, upright, 208–220 V/60 Hz	U9440-0002	\$18,555.00
Upright freezer rack, Innova U360, U535 and U725		
2 in (5 cm) tall box, 28 boxes per rack	K0641-3000	208.00
3 in (7.5 cm) tall box, 20 boxes per rack	K0641-3001	208.00
4 in (10 cm) tall box, 12 boxes per rack	K0641-3002	208.00
New Brunswick Innova CO ₂ back-up system, 120–220 V/60 Hz ⁵	U9043-0002	1,695.00
New Brunswick Innova LN ₂ back-up system, 120–220 V/60 Hz ⁵	U9044-0002	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.



New Brunswick™ Innova® C585



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	20.7 ft³/585 L
Pull down to -85°C (hours) ¹	32
Power supply	120 V/60 Hz 208–220 V/60 Hz
Power consumption	13.9 kWh/day
Number of compartments	1
Number of shelves	N/A
Racks per freezer	
Boxes per freezer	
2 in (5 cm) tall boxes	416
3 in (7.5 cm) tall boxes	288
4 in (10 cm) tall boxes	192
Noise level (dB)	56
Internal dimensions (W x D x H)	47.2 x 24.6 x 30.7 in/ 120 x 62.5 x 78 cm
External dimensions (W x D x H) ^{2,3,4}	66.5 x 30.9 x 43 in/ 169 x 78.5 x 109.2 cm
Weight w/o accessories	529 lbs/240 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description
The C585 chest freezer combines high efficiency and superior capacity with ergonomic operation while maintaining the reputation of long-term durability, and quality construction. It has a space-saving design and also provides excellent energy efficiency.

- Product features**
- > Capacity: 585 L
 - > Holds up to 41,600 samples
 - > 30 mm thick inner lids, constructed from molded insulation, helps to maintain temperature stability
 - > Vacuum insulation paneling reduces footprint by 30%
 - > Fits through a standard doorway
 - > Internal voltage stabilizer
 - > Low noise and heat output
 - > Audible and visual alarm
 - > Password protected, easy to use control panel
 - > High-quality stainless steel chamber and shelves that are easily maintained
 - > Warranty: 2-year labor, and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova C585, 585 L, chest, 120 V/60 Hz	U9400-0000	\$17,470.00
New Brunswick Innova C585, 585 L, chest, 208–220 V/60 Hz	U9400-0002	17,470.00
Chest freezer rack, Innova C585 and C760, Premium C340 and C660		
2 in (5 cm) tall box, 13 boxes per rack	K0641-1690	163.00
3 in (7.5 cm) tall box, 9 boxes per rack	K0641-1700	163.00
4 in (10 cm) tall box, 6 boxes per rack	K0641-1750	163.00
New Brunswick Innova CO ₂ back-up system, 120–220 V/60 Hz ⁵	U9043-0002	1,695.00
New Brunswick Innova LN ₂ back-up system, 120–220 V/60 Hz ⁵	U9044-0002	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



New Brunswick™ Innova® C760



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	26.9 ft³/760 L
Pull down to -85°C (hours) ¹	5.8
Power supply	208–220 V/60 Hz
Power consumption	16.8
Number of compartments	1
Number of shelves	N/A
Racks per freezer	44
Boxes per freezer	
2 in (5 cm) tall boxes	572
3 in (7.5 cm) tall boxes	396
4 in (10 cm) tall boxes	264
Noise level (dB)	58
Internal dimensions (W x D x H)	61.4 x 24.6 x 30.7 in/ 156 x 62.5 x 78 cm
External dimensions (W x D x H) ^{2,3,4}	80.7 x 30.9 x 43 in/ 205 x 78.5 x 109.2 cm
Weight w/o accessories	628 lbs/285 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description
The C760 is the largest chest freezer that we offer. It offers exceptional quality that goes beyond capacity to provide you with optimal performance, outstanding energy efficiency, and superior temperature management. Its space-saving and ergonomic design provide ease of use for every lab.

- Product features**
- > Capacity: 760 Liters
 - > Holds up to 57,200 samples
 - > 30 mm thick inner lids, constructed from molded insulation, helps to maintain temperature stability
 - > Vacuum insulation paneling reduces footprint by 30%
 - > Fits through a standard doorway
 - > Internal voltage stabilizer
 - > Low noise and heat output
 - > Audible and visual alarm
 - > Password protected, easy to use control panel
 - > High-quality stainless steel chamber and shelves that are easily maintained
 - > Warranty: 2-year labor, and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova C760, 760 L, chest, 208–220 V/60 Hz	U9410-0002	\$19,385.00
Chest freezer rack, Innova C585 and C760, Premium C340 and C660		
2 in (5 cm) tall box, 13 boxes per rack	K0641-1690	163.00
3 in (7.5 cm) tall box, 9 boxes per rack	K0641-1700	163.00
4 in (10 cm) tall box, 6 boxes per rack	K0641-1750	163.00
New Brunswick Innova CO ₂ back-up system, 120–220 V/60 Hz ⁵	U9043-0002	1,695.00
New Brunswick Innova LN ₂ back-up system, 120–220 V/60 Hz ⁵	U9044-0002	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

New Brunswick™ Premium Freezers



Description

Premium Freezers are known for their energy efficiency, reliability, and worry-free, long-term sample preservation. They provide many of the same features as our Innova models, but are conventionally-insulated for a cost-effective alternative. Polyurethane insulation combined with a highly efficient cooling system achieve and maintain ultra-low temperatures of -86°C. Premium Freezer models provide significant energy savings—up to 40% less energy consumption compared to other manufacturers’ models.

- > Five interior compartments with insulated inner doors for superior sample protection
- > Polyurethane insulation for high performance and efficiency
- > Five models available ranging from 12–25 ft³
- > Heated vacuum release valve for ergonomic freezer reentry
- > Heavy duty castors, high-quality gaskets and stainless steel interior
- > Easy to read, ergonomic control panel with audible and visual alarms

i For more information go to www.eppendorf.com

New Brunswick™ Premium U410



Technical specifications	
Insulation	Polyurethane foam
Capacity	14.5 ft³/410 L
Pull down to -85°C (hours) ¹	4.1
Power supply	120 V/60 Hz 208–220 V/60 Hz
Power consumption	13 kWh/day
Number of compartments	5
Number of shelves	4
Racks per freezer	15
Boxes per freezer	
2 in (5 cm) tall boxes	240
3 in (7.5 cm) tall boxes	180
4 in (10 cm) tall boxes	120
Noise level (dB)	57
Internal dimensions (W x D x H)	21.7 x 22.6 x 49.8 in/ 55 x 57.5 x 126.5 cm
External dimensions (W x D x H) ^{2,3,4}	31.5 x 33.5 x 75.4 in/ 80 x 85.2 x 191.5 cm
Weight w/o accessories	518 lbs/235 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description

The economical U410 packs excellent performance into our smallest upright Premium freezer. The U410 will provide years of maintenance-free, reliable operation with minimal energy consumption compared to competitive models.

Product features

- > Capacity: 410 L
- > Holds up to 24,000 samples
- > Fits through a standard doorway
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy to use control panel
- > High-quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor, and 5 years all parts

Ordering information

Description	Catalog No.	List USD
New Brunswick Premium U410, 410 L, upright, 120 V/60 Hz	U9260-0000	\$13,350.00
New Brunswick Premium U410, 410 L, upright, 208–220 V/60 Hz	U9260-0002	13,350.00
Upright freezer rack, CryoCube® F570, F570h, Premium U410, U570 and U700		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.



New Brunswick™ Premium U700



Technical specifications	
Insulation	Polyurethane foam
Capacity	25.0 ft³/700 L
Pull down to -85°C (hours) ¹	5.9/4.8
Power supply	120 V, 60 Hz/ 208–220 V/60 Hz
Power consumption	15.9 kWh/day
Number of compartments	5
Number of shelves	4
Racks per freezer	30
Boxes per freezer	
2 in (5 cm) tall boxes	480
3 in (7.5 cm) tall boxes	360
4 in (10 cm) tall boxes	240
Noise level (dB)	61
Internal dimensions (W x D x H)	34.1 x 24.1 x 51.8 in/ 86.7 x 61.3 x 131.6 cm
External dimensions (W x D x H) ^{2,3,4}	44.1 x 34.3 x 77 in/ 112.1 x 87 x 195.9 cm
Weight w/o accessories	615 lbs/279 kg

¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.

Description
The U700 is the newest and largest upright freezer in our Premium lineup. The U700 is a great cost alternative to the Innova U725 but still shares the same reliability and efficiency.

- Product features**
- > Capacity: 700 L
 - > Holds up to 48,000 samples
 - > Fits through a standard doorway
 - > Low noise and heat output
 - > Audible and visual alarm
 - > Password protected, easy-to-use control panel
 - > High-quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
 - > Warranty: 2-year labor and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
New Brunswick Premium U700, 700 L, upright, 120 V/60 Hz	U9280-0000	\$17,170.00
New Brunswick Premium U700, 700 L, upright, 208–220 V/60 Hz	U9280-0002	17,170.00
Upright freezer rack, CryoCube® F570, F570h, Premium U410, U570 and U700		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF ^{®5}	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF ^{®5}	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



New Brunswick™ HEF® Freezers



Description
For Eppendorf, being green is not a trend, it's in our nature. Since 1945 we have recognized our place as a global citizen and began our green initiative by building high-quality, long lasting products. Today, we continue to set new standards with our HEF freezers, among the most energy-efficient ultra-low temperature freezers on the market. HEF Freezers minimize operating costs while providing superior protection for your critical samples. They reduce energy consumption by up to 59% when compared to other models. HEF Freezers provide all of the features of New Brunswick Premium models and more.

- > Vacuum insulation panels combined with traditional polyurethane foam form a 5 inch thick layer of insulation for exceptional energy efficiency
- > A high-efficiency, low-noise condenser fan and compressor system maximize energy efficiency

i For more information go to www.eppendorf.com



New Brunswick™ HEF® U410



Technical specifications	
Insulation	Vacuum insulation paneling/polyurethane foam
Capacity	14.5 ft³/410 L
Pull down to -85°C (hours) ¹	5.8
Power supply	120 V, 60 Hz
Power consumption	8.6 kWh/day
Number of compartments	5
Number of shelves	4
Racks per freezer	15
Boxes per freezer	
2 in (5 cm) tall boxes	240
3 in (7.5 cm) tall boxes	180
4 in (10 cm) tall boxes	120
Noise level (dB)	57
Internal dimensions (W x D x H)	21.7 x 22.6 x 49.8 in/ 55 x 57.5 x 126.5 cm
External dimensions (W x D x H) ^{2,3,4}	31.5 x 33.5 x 75.4 in/ 80 x 85.2 x 191.5 cm
Weight w/o accessories	518 lbs/235 kg

¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.

Description

The HEF upright freezers are among the most environmentally friendly, energy efficient ULT freezers on the market. The most compact model in the HEF line, the HEF U410, is identical to the Premium U410, except that it further reduces energy consumption by about 33%.

Product features

- > Capacity: 410 L
- > Holds up to 24,000 samples
- > Fits through a standard doorway
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy to use control panel
- > High-quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor and 5 years all parts

Ordering information

Description	Catalog No.	List USD
New Brunswick HEF U410, 410 L, upright, 120 V/60 Hz	U9260-0007	\$14,545.00
Upright freezer rack, CryoCube® F570, F570h, Premium U410, U570 and U700		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



CryoCube® Freezers



- 1. Premium seals for optimal uniformity
- 2. New automatic vent port on front door improves energy consumption and uniformity while providing easier access inside to samples
- 3. New ergonomic handle requires less force and provides easier access
- 4. Magnetic closures on inner doors provide easier access
- 5. New high-efficiency fan, compressor, and condenser

Description

The CryoCube Ultra-low Temperature Freezers from Eppendorf combine maximum sample security with increased energy efficiency. New vent, compressor, condenser, and fan technology decrease power consumption. A more ergonomic handle makes CryoCube freezers easier to use. Eppendorf quality means years of trouble free operation, trusted sample security, and excellent energy efficiency.

i For more information go to www.eppendorf.com



CryoCube® F570



Technical specifications	
Insulation	Polyurethane foam
Capacity	20 ft³ / 570 L
Pull down to -85°C (hours) ¹	4.75
Power supply	120 V, 60 Hz / 208–220 V, 60 Hz
Power consumption ¹	11.5 / 12.0 kWh/day
Number of compartments	5
Number of shelves	4
Racks per freezer	25
Boxes per freezer	
2 in (5 cm) tall boxes	400
3 in (7.5 cm) tall boxes	300
4 in (10 cm) tall boxes	200
Noise level (dB)	58.8
Internal dimensions (W x D x H)	49.8 x 30.1 x 22.6 in / 1,265 x 765 x 575 mm
External dimensions (W x D x H) ^{2,3,4}	76.4 x 40.4 x 33.5 in / 1,940 x 1025 x 852 mm
Weight w/o accessories	595 lb / 270 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm. F570 bezel adds 1.8 in/44.3 mm to the depth; FC660 bezel adds 1.5 in/37.6 mm to the depth.	

Description

The CryoCube F570 is designed for increased energy efficiency and ease of use. New high efficiency fan, compressor, and condenser decrease power consumption. The new ergonomic handle and magnetic closures provide easier access to samples.

Product features

- > Capacity: 570 L
- > Consumes only 11.5–12 kW/day
- > Holds up to 40,000 samples
- > Magnetic closures on inner doors provide easier access
- > Fits through a standard doorway
- > Insulated, removable inner doors
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy-to-use control panel
- > High quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
CryoCube® F570, 570 L, 115 V/50 Hz	F570200005	\$15,645.00
CryoCube® F570, 570 L, 208–230 V/60 Hz	F570400005	15,645.00
Upright freezer rack, CryoCube® F570, F570h, Premium U410, U570 and U700		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF ^{®5}	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF ^{®5}	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



CryoCube® FC660



Technical specifications	
Insulation	Polyurethane foam
Capacity	23.3 ft³ / 660 L
Pull down to -85°C (hours) ¹	4.76
Power supply	208–220 V, 60 Hz
Power consumption ¹	10.9 kWh/day
Number of compartments	1
Number of shelves	N/A
Racks per freezer	40
Boxes per freezer	
2 in (5 cm) tall boxes	520
3 in (7.5 cm) tall boxes	360
4 in (10 cm) tall boxes	240
Noise level (dB)	58.5
Internal dimensions (W x D x H)	29.9 x 57.9 x 23.2 in / 760 x 1,470 x 590 mm
External dimensions (W x D x H) ^{2,3,4}	42.9 x 81.5 x 33.5 in / 1,090 x 2,070 x 845 mm
Weight w/o accessories	617 lb / 280 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description

The CryoCube FC660 provides increased energy efficiency and ease of use in a large capacity chest freezer. The new high efficiency fan and compressor decrease both power consumption and noise. Premium Eppendorf manufacturing means long-term reliability and dependability. The CryoCube FC660h delivers the high-capacity of the FC660 with further increased energy efficiency. The CryoCube FC660h is the eco-friendly solution in chest freezer technology.

Product features

- > Capacity: 660 L
- > Consumes only 10.9 kW/day
- > Holds up to 52,000 samples
- > Fits through a standard doorway
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy-to-use control panel
- > High quality stainless steel interior
- > Warranty: 2-year labor and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
CryoCube® FC660, 660 L, 208–230 V/60 Hz	F660400005	\$16,515.00
Upright freezer rack, CryoCube® FC660/h, Innova® C585 and C760, Premium C340, and C660		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF ^{®5}	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF ^{®5}	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.



CryoCube® F570h



Technical specifications	
Insulation	Polyurethane foam + VIP panels
Capacity	20 ft³ / 570 L
Pull down to -85°C (hours) ¹	5
Power supply	120 V, 60 Hz
Power consumption ¹	9.4 kWh/day
Number of compartments	5
Number of shelves	4
Racks per freezer	25
Boxes per freezer	
2 in (5 cm) tall boxes	400
3 in (7.5 cm) tall boxes	300
4 in (10 cm) tall boxes	200
Noise level (dB)	58.8
Internal dimensions (W x D x H)	49.8 x 30.1 x 22.6 in / 1,265 x 765 x 575 mm
External dimensions (W x D x H) ^{2,3,4}	76.4 x 40.4 x 33.5 in / 1,940 x 1025 x 852 mm
Weight w/o accessories	653 lb / 296 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description
The new CryoCube Ultra-low Temperature Freezers from Eppendorf combine maximum sample security with increased energy efficiency. New vent, compressor, condenser, and fan technology decrease power consumption. A more ergonomic handle makes CryoCube freezers easier to use. Eppendorf quality means years of trouble free operation, trusted sample security, and excellent energy efficiency.

Product features

- > Capacity: 570 L
- > Consumes only 9.4 kW/day
- > Holds up to 40,000 samples
- > Magnetic closures on inner doors provide easier access
- > Fits through a standard doorway
- > Insulated, removable inner doors
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy-to-use control panel
- > High quality stainless steel interior and shelves that are adjustable in 1/2 inch increments and easily maintained
- > Warranty: 2-year labor and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
CryoCube® F570h, 570 L, 115 V/50 Hz	F570220005	\$16,705.00
Upright freezer rack, CryoCube® F570, F570h, Premium U410, U570 and U700		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.

i For more information go to www.eppendorf.com



CryoCube® FC660h



Technical specifications	
Insulation	Polyurethane foam
Capacity	23.3 ft³ / 660 L
Pull down to -85°C (hours) ¹	4.74
Power supply	208–220 V, 60 Hz
Power consumption ¹	9.5 kWh/day
Number of compartments	1
Number of shelves	N/A
Racks per freezer	40
Boxes per freezer	
2 in (5 cm) tall boxes	520
3 in (7.5 cm) tall boxes	360
4 in (10 cm) tall boxes	240
Noise level (dB)	60.1
Internal dimensions (W x D x H)	29.9 x 57.9 x 23.2 in / 760 x 1,470 x 590 mm
External dimensions (W x D x H) ^{2,3,4}	42.9 x 81.5 x 33.5 in / 1,090 x 2,070 x 845 mm
Weight w/o accessories	670 lb / 304 kg
¹ Empty freezer with shelves fitted, upright freezers only, pulldown from 22–26°C ambient conditions. ² Optional CO2/LN2 back-up systems add 3.4 in/8.65 cm to height. ³ To allow for handles and hinges, add 3.1 in/80 mm to width of upright freezers and 4.3 in/110 mm to the depth of chest freezers. ⁴ Door open adds up to 6 in/15 cm.	

Description
The CryoCube FC660 provides increased energy efficiency and ease of use in a large capacity chest freezer. The new high efficiency fan and compressor decrease both power consumption and noise. Premium Eppendorf manufacturing means long-term reliability and dependability. The CryoCube FC660h delivers the high-capacity of the FC660 with further increased energy efficiency. The CryoCube FC660h is the eco-friendly solution in chest freezer technology.

Product features

- > Capacity: 660 L
- > Consumes only 10.9 kW/day
- > Holds up to 52,000 samples
- > Fits through a standard doorway
- > Low noise and heat output
- > Audible and visual alarm
- > Password protected, easy-to-use control panel
- > High quality stainless steel interior
- > Warranty: 2-year labor and 5 years all parts

Ordering information		
Description	Catalog No.	List USD
CryoCube® FC660h, 660 L, 208–230 V/60 Hz	F660420005	\$17,780.00
Upright freezer rack, CryoCube® FC660/h, Innova® C585 and C760, Premium C340, and C660		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00
CO ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9043-0006	1,695.00
LN ₂ back-up system, 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF® ⁵	U9044-0006	1,695.00

⁵ Factory installation available for no extra charge if purchased with freezer at the same time.



Eppendorf TCA-3



Description
The Eppendorf TCA-3 real-time temperature monitoring system provides significant, simple, and safe sample security for your ULT freezer. Customizable alarm notifications can be communicated by phone, Email and text message for ultimate peace-of-mind and user convenience. All your data logging can be accessed anywhere, any time by logging in to the secure network with any web-enabled device.

Technical specifications	
Dimensions	4.9 x 2.6 x 1.2 in/ 12.5 x 6.6 x 3.0 cm
Weight	227 g (8 oz.)
Sampling rate	User-selected, 30 sec. to 24 hr.
Emergency Data Storage	256 data points
Operating environment	–40°C to 70°C, 5 to 95% rh
Performance Specifications	
In Chamber temperature sensor	
Temperature range	–200°C to +200°C
Typical accuracy	±1°C
Measurement resolution	0.1°C
Sensor type	1 x RTD
Ambient temperature sensor	
Temperature range	–40°C to + 70°C
Typical accuracy at 25°C	± 1.4°C
Typical accuracy over full range	± 2.1%
Measurement resolution	0.21°C

- Product features**
- > Small and versatile monitor works with any freezer
 - > Customizable alarm notifications by phone, Email and text are sent to multiple users until an acknowledgement is received
 - > Non-alterable data meets regulatory requirements
 - > Alarm acknowledgements and resolutions are tracked for regulatory control
 - > Continuous, real-time monitoring records infinite data points for the lifetime of your monitor
 - > Easy, Microsoft Excel® compatible report generation
 - > Chamber and ambient temperature probes included and calibrated for immediate use (temperature range from –200°C to +200°C)
 - > No monthly service fees
 - > Can link multiple monitors to one user login
 - > Firewall compatible trained technical support
 - > 1-year parts and labor warranty

Ordering information		
Description	Catalog No.	List USD
New Brunswick TCA-3 Temperature Monitoring System		
TCA-3 monitoring system, 120 V/60 Hz	P0625-1630	\$1,815.00
TCA-3 RTD temperature probe (accessory)	P0625-1920	405.00
TCA-3 Thermocouple probe for temperatures below –100 °C	P0625-1915	405.00

Freezer racks



Ordering information		
Description	Catalog No.	List USD
Upright freezer rack, Innova® U101		
2 in (5 cm) tall box,10 boxes per rack	K0641-3003	\$183.00
3 in (7.5 cm) tall box, 6 boxes per rack	K0641-3004	183.00
4 in (10 cm) tall box, 4 boxes per rack	K0641-3005	183.00
Upright freezer rack, Innova U360, U535 and U725		
2 in (5 cm) tall box, 28 boxes per rack	K0641-3000	208.00
3 in (7.5 cm) tall box, 20 boxes per rack	K0641-3001	208.00
4 in (10 cm) tall box, 12 boxes per rack	K0641-3002	208.00
Chest freezer rack, Innova C585 and C760, Premium C340 and C660		
2 in (5 cm) tall box, 13 boxes per rack	K0641-1690	163.00
3 in (7.5 cm) tall box, 9 boxes per rack	K0641-1700	163.00
4 in (10 cm) tall box, 6 boxes per rack	K0641-1750	163.00
Upright freezer rack, Premium and HEF U410, Premium U700 and CryoCube F570. F570h, FC660, and FC660h		
2 in (5 cm) tall box, 16 boxes per rack	K0641-1900	177.00
3 in (7.5 cm) tall box, 12 boxes per rack	K0641-1890	177.00
4 in (10 cm) tall box, 8 boxes per rack	K0641-1880	177.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



NEW - Eppendorf Storage Boxes



The Eppendorf Storage Boxes - a complete system solution for sample storage

The comprehensive modular concept allows you to select the optimal box combinations for individual storage demands. The outer footprint dimensions are compatible with common freezer rack systems and the different inner grid variants provide for a perfect fit to all typical tube formats: cryogenic tubes, microcentrifuge tubes, conical tubes 15 and 50 mL as well as other laboratory vessels. This space-saving approach together with the application benefits resulting from the listed product features help to optimize your storage and archiving of samples.

Product features

- > Made of polypropylene (PP) for high stability in freezing applications and a smooth opening and closing
- > For freezing to -86 °C
- > High-contrast permanent alphanumeric marking of each location through laser labeling enables easy sample reference and minimizes risk of sample mix-up
- > Autoclavable (121 °C, 20 min)
- > Transparent lid for easy and fast sample inspection
- > Flexible and reliable labeling on the light colored box and on the 5 writing areas of the lid
- > Optimal use of freezer space due to flexibility of various formats

Ordering information		
Description	Catalog No.	List USD
Storage Box 10 x 10 , for 100 cryogenic tubes w. int. thread, 3 pcs., height 52.8 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140508	\$31.50
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 1-2 mL, 3 pcs., height 52.8 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140516	32.10
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 3 mL, 2 pcs., height 76.2 mm, 3 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140540	22.00
Storage Box 9 x 9 , for 81 screw cap (cryog.) tubes 4-5 mL, 2 pcs., height 101.6 mm, 4 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140567	22.80
Storage Box 8 x 8 , for 64 tubes 1-2 mL, 3 pcs., height 52.8 mm, 2 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140524	32.10
Storage Box 5 x 5 , for 25 tubes 5 mL, 4 pcs., height 63.5 mm, 2.5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140532	45.60
Storage Box 5 x 5 , for 25 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140583	23.40
Storage Box 3 x 3 , for 9 tubes 50 mL and 4 tubes 15 mL, 2 pcs., height 127 mm, 5 inch, polypropylene, for freezing to -86 °C, autoclavable, with lid and alphanumeric	0030140591	23.40

i For more information go to www.eppendorf.com

Freezer Cardboard Storage Boxes



Freezer Cardboard Storage Boxes

- > White cardboard box with water resistant coating, designed to withstand ultra-low temperature
- > Available in 50 mm (2 in), 75 mm (3 in) and 100 mm (4 in) tall boxes
- > Compatible with box dividers 7 x 7 to 10 x 10 (dividers sold separately)

Ordering information		
Description	Catalog No.	List USD
Freezer Cardboard Storage Boxes, white		
2 in (5 cm) tall box	B50-SQ	\$5.00
3 in (7.5 cm) tall box	B75-SQ	5.00
4 in (10 cm) tall box	B95-SQ	5.50

Freezer Box Dividers



Freezer Box Dividers

- > Available in 7 x 7, 8 x 8, 9 x 9 and 10 x 10 configurations
- > Compatible with freezer cardboard storage boxes (sold separately)

Ordering information		
Description	Catalog No.	List USD
Freezer Box Dividers		
7 x 7, 17.4 mm max. tube diameter, holds 49 tubes	D49	\$4.00
8 x 8, 15 mm max. tube diameter, holds 64 tubes	D64	4.00
9 x 9, 13 mm max. tube diameter, holds 81 tubes	D81	4.00
10 x 10, 11.8 mm max. tube diameter, holds 100 tubes	D100	4.00



Storage Box 5.0 mL



Product features

- > Made of Polypropylene for high stability in freezing applications
- > Alphanumeric code for easy sample reference
- > Dimensions optimized for Eppendorf Tubes® 5.0 mL for space-saving storage
- > Comes with 2 boxes: 1 red and 1 blue

Ordering information

Description	Catalog No.	List USD
Storage Box 5.0 mL , for 25 tubes 5.0 mL, 2 pcs., 5 × 5 grid, blue and red, made of polypropylene, for freezing to –86°C, with lid and alphanumeric code, height 65 mm	0030127943	\$24.30
Eppendorf Tubes 5.0 mL , 5.0 mL		
Eppendorf Quality™, 200 tubes (2 bags x 100 tubes)	0030119401	54.10



Chart recorder

- > Includes chart recorder, RTD probe, keys, chart recorder paper and chart recorder pens
- > Will continuously monitor and record freezer temperature
- > Selectable temperature range (0 to –50°C and –50 to –100°C) and rotation speed
- > User configurable built in Hi and Lo temperature alarms
- > Can be factory installed with your freezer order at no additional charge or retrofitted on location

Ordering information

Description	Catalog No.	List USD
Chart recorder , with reverse scale charts¹	P0625-2100	\$970.00
Chart recorder pens , 3 pk	K0660-0051	64.50
Chart recorder paper , range –50°C to –100°C, 60 pcs.	P0625-2110	96.00
Chart recorder paper , range 0°C to –50°C, 60 pcs.	P0625-2111	96.00

¹ Factory installation available for no extra charge if purchased with freezer at the same time.



New Brunswick™ CO₂ and LN₂ Back-up Systems

- > Available to work with either liquid CO₂ or LN₂. Liquid CO₂ can maintain temperatures between –50°C and –70°C, where as LN₂ can go down to –85°C.
- > Equipped with a battery back-up to temporarily protect the contents of your freezer in case of power failure
- > Both systems can be factory installed with your freezer order at no additional charge or retrofitted on location
- > CO₂ and LN₂ are not interchangeable systems
- > Gas tank is not included with back-up systems

Ordering information

Description	Catalog No.	List USD
New Brunswick Innova® CO₂ back-up system , 120–220 V/60 Hz¹	U9043-0002	\$1,695.00
New Brunswick Innova LN₂ back-up system , 120–220 V/60 Hz¹	U9044-0002	1,695.00
CO₂ back-up system , 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF®	U9043-0006	1,695.00
LN₂ back-up system , 120–220 V/60 Hz, CryoCube®, New Brunswick™ Premium, and HEF®	U9044-0006	1,695.00

¹ Factory installation available for no extra charge if purchased with freezer at the same time. Tanks are not included or sold by Eppendorf North America.



Padlock Adapter Kit

- > Allows a user-supplied padlock to be added to the freezer's outer handle for extra security
- > Available for upright models only

Ordering information

Description	Catalog No.	List USD
Padlock adapter kit for upright models	P0625-1170	\$168.00

i For more information go to www.eppendorf.com



Freezers Accessories and Replacement Parts

Ordering information		
Description	Catalog No.	List USD
Freezer air filter		
U101	K0200-0506	\$ 17.50
U360	P0625-1110	17.50
Upright Models	K0200-0511	34.50
Chest Models	K0200-0516	28.50
Freezer extra shelf, includes four mounting clips		
U101	P0625-0180	72.00
U360	P0625-1180	127.00
U535	K0280-1034	187.00
U725	K0280-1036	202.00
U410	K0280-1031	128.00
F570	K0280-1030	141.00
U700	P0625-1185	143.00
Stainless Steel Shelf Clips, pack of 4	K0280-0550	15.50
Inner lids for Chest Freezers		
C585	K0160-0777	21.00
C760	K0160-0776	12.50
C340	K0280-1041	170.00
FC660	K0280-1043	173.00
Power cords		
120 V/60 Hz	P0625-0354	97.00
208–220 V/60 Hz	P0625-0358	39.00
Keys		
Key only for mains cover	P0625-0111	8.00
Key only upright door handle	P0625-0640	15.50
Key only chest door handle	P0625-0110	17.50
Additional		
Battery, 6V, 2.8 Ah, all models	K0480-0170	54.00
Alarm connector plug, for bms relay	K0380-0451	13.50
External Voltage Stabilizer, 120 V/60 Hz	M1322-0000	1,765.00
External Voltage Stabilizer, 208–230 V/60 Hz	M1322-0002	1,765.00
U101 stacking kit, U101 stacking kit	P0625-0020	315.00
Padlock adapter kit, for all upright models	P0625-1170	168.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Ultra-low Temperature Service Products

Unmatched service and support
Dedicated to providing you the best service and support for your ULT and all accessories, Eppendorf provides a convenient and comprehensive manufacturer’s warranty covering labor and parts. Our service and support organization consists of qualified field technicians, and highly trained customer service and technical representatives who are readily available to offer professional assistance when and where you need it.

- > Experienced customer and technical support representatives
- > Professional and qualified field service technicians
- > Every freezer is equipped with unique S.M.A.R.T. Plus™ diagnostic software that allows system engineers to diagnose most issues over the phone at no cost—saving you time and money
- > Warranty provides labor for 2 years and all parts for 5 years
- > Accessories have a comprehensive 1-year warranty
- > Inquire for information on refurbished freezers

Extended Warranty
Your freezer comes with a multiple year warranty which covers all parts, labor and travel or shipment to a Service Center for smaller units. The Extended Warranty provides the same coverage, terms and conditions as the original warranty. Preventive maintenance, customer installed components and consumables are not included.

Extended Warranty	Catalog No.	List USD
ULT Freezers	901513576	\$1,750.00

Complete 5/5 Warranty; Extra 3 years of Labor
Three years additional LABOR ONLY warranty coverage for New Brunswick™ ULT Freezers. This supplemental, labor only, warranty increases the new instrument warranty to provide a full 5/5 (parts and labor) coverage.

Additional Labor Warranty	Catalog No.	List USD
ULT Freezers	LABOR3-ULT	\$1,877.00



For more information go to www.eppendorf.com/epServices.

Advantage OS
An easy to use value packaged service option to help plan in advance and protect your system. Advantage Service provides labor and travel for two visits; a scheduled preventive maintenance (PM) and an unscheduled single repair visit in the future. You may use both visits for repair needs but only one of the visits may be a PM.

Advantage Service does not include, but provides a discount on parts for the PM and any additional repair service. If both visits are utilized before the year term of this agreement, early renewal is an option or a parts and labor discount will be in place for additional service as needed.

Advantage OS	Catalog No.	List USD
ULT Freezers	901513578	\$1,400.00

Cell Handling



Discover our comprehensive range of instruments and consumables for the manipulation, cultivation and analysis of cells.

For nearly 70 years, Eppendorf has been providing innovative technologies and premium products for optimizing work processes in modern laboratories. For handling cells, in addition to manipulators and injectors, incubators and consumables for cultivation, complete bioreactor systems for cell culture applications are also available. Corresponding detection systems are offered as required for subsequent photometric or fluorescence-based analysis.

- > Photometers and Spectrometers 334-347
- > Electroporation 350-351
- > Cell Manipulators 352-377
- > Cell Culture and Cell Imaging Consumables 380-395
- > CO₂ Incubators 398-413
- > Shakers 418-456
- > Bioprocessing 463-479
- > Performance Plans 348-349, 378-379, 414-415, 457-461, 480-481



Model	BioSpectrometer basic	BioSpectrometer kinetic
Page	334	334
Dimensions (W x D x H)	11.6 x 15.7 x 6 in / 295 x 400 x 150 mm	11.6 x 15.7 x 6 in / 295 x 400 x 150 mm
Weight w/o accessories	11.9 lbs / 5.4 kg	12.1 lbs / 5.5 kg
Power supply	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz
Beam receiver absorption	CMOS photodiode array	CMOS photodiode array
Beam receiver fluorescence		
Cuvette shaft	12.5 mm x 12,5 mm, untempered	12.5 mm x 12.5 mm, tempered
Light path height	8.5 mm	8.5 mm
Light source absorption	Xenon flash lamp	Xenon flash lamp
Light source fluorescence		
Measuring principle absorption	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam
Measuring principle fluorescence		
Absorption measuring range	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
Fluorescence measuring range		
Power consumption	Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 30 W during operating step Approx. 5 W with dimmed display and temperature control switched off
Random error absorption	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1
Smallest step size	1 nm	1 nm
Spectral bandwidth	≤ 4 nm	≤ 4 nm
Systematic error	± 1 % (A = 1)	± 1 % (A = 1)
Wavelength range	200 nm – 830 nm	200 nm – 830 nm



BioSpectrometer fluorescence	BioPhotometer D30
334	338
11.6 x 15.7 x 6 in / 295 x 400 x 150 mm	11.6 x 15.7 x 6 in / 295 x 400 x 150 mm
11.9 lbs / 5.4 kg	11.9 lbs / 5.4 kg
120 V, 50 – 60 Hz	120 V, 50 – 60 Hz
CMOS photodiode array	CMOS photodiodes
Photodiodes	
12.5 mm x 12.5 mm, untempered	12.5 mm x 12.5 mm, untempered
8.5 mm	8.5 mm
Xenon flash lamp	Xenon flash lamp
LED	
Single-beam absorption spectrophotometer with reference beam	Single-beam absorption photometer with reference beam
Confocal filter fluorometer with reference beam	
0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
0.5 nM – 2,000 nM fluorescein (emission wavelength 520 nm)	
Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 15 W during operating step Approx. 5 W with dimmed display
≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1	± 0.5 nm
1 nm	
≤ 4 nm	≤ 4 nm
± 1 % (A = 1)	± 1 nm
200 nm – 830 nm	230, 260, 280, 320, 340, 405, 490, 562, 595, 600 nm

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Eppendorf BioSpectrometer®



Description

The Eppendorf **BioSpectrometers** are small, very compact spectrophotometers that allow users to conduct measurements in the UV/ Vis and fluorescence range. Absorbance spectra can be recorded, and individual wavelength measurements can be conducted, in a spectral range of 200 nm to 830 nm. On the **BioSpectrometer kinetic**, the cuvette shaft can also be tempered in a range of +20 °C to +42 °C, meaning that enzyme and substrate kinetics can be measured directly in the device. The integrated fluorescence unit of the **BioSpectrometer fluorescence** can be used to increase the measuring range by using fluorescent dyes.

Product features

- > UV/Vis spectral range 200 nm to 830 nm
- > Freely selectable wavelengths across the entire UV/Vis spectral range (increment: 1 nm)
- > Compatible with microliter measuring cells and standard cuvettes
- > Temperature controlled cuvette shaft in the BioSpectrometer kinetic (20 °C to 42 °C in 0.1 °C increments)
- > Fluorescence intensity measurements across a range of 0.5 nM to 2,000 nM fluorescein with the BioSpectrometer fluorescence
- > Data transfer via USB interface
- > Xenon flash lamp with very long service life
- > Help box with explanation of each individual step in 5 languages
- > Integrated application and results memory
- > Preprogrammed applications for quick start

Applications

- > Absorbance measurement for one or more wavelengths, recording of wavelength scans
- > Applications with evaluations via factor, standard or standard series
- > Two-wavelength method with subtraction and division evaluation
- > Concentration via standard series (including linear and non-linear regression and linear interpolation)
- > Fluorescence measurements increase the measuring range by a factor of 1,000, ideal for detecting low amounts of DNA
- > Temperature controlled cuvette shaft for determining enzyme and substrate kinetics

1. UV/Vis spectral range 200 nm to 830 nm

2. Freely selectable wavelengths across the entire spectral range (increment: 1 nm)

3. Preprogrammed applications for a quick start

4. Integrated application and results memory
5. Data transfer via USB interface

6. Direct print-out of results using optional Thermal Printer DPU-S445

7. Long-lasting Xenon flash lamp

8. Help box with explanation of each individual step in 5 languages

9. Compatible with microliter measuring cells and standard cuvettes (8.5 mm path height)

i For more information go to www.eppendorf.com/photometry

Product appearance, specifications, and/or prices are subject to change without notice.





Eppendorf BioSpectrometer®

Technical specifications			
Model	BioSpectrometer basic	BioSpectrometer kinetic	BioSpectrometer fluorescence
Display	5.7" VGA TFT display	5.7" VGA TFT display	5.7" VGA TFT display
Interfaces	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface
Power supply	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz	120 V, 50 – 60 Hz
Dimensions (W × D × H)	11.6 × 15.7 × 6 in / 295 × 400 × 150 mm	11.6 × 15.7 × 6 in / 295 × 400 × 150 mm	11.6 × 15.7 × 6 in / 295 × 400 × 150 mm
Weight w/o accessories	11.9 lb / 5.4 kg	12.1 lb / 5.5 kg	11.9 lb / 5.4 kg
Beam receiver absorption	CMOS photodiode array	CMOS photodiode array	CMOS photodiode array
Beam receiver fluorescence			Photodiodes
Cuvette material	For measurements in the UV: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1600 nm). For measurements in the visible range: glass or plastic. For microvolume measurements: microvolume measuring cells such as the Eppendorf µCuvette® G1.0	For measurements in the UV: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1600 nm). For measurements in the visible range: glass or plastic. For microvolume measurements: microvolume measuring cells such as the Eppendorf µCuvette® G1.0	For measurements in the UV range: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1,600 nm). For measurements in the visible range: glass or plastic. For microvolume measurements: microvolume measuring cells such as the Eppendorf µCuvette® G1.0
Cuvette shaft	12.5 mm × 12,5 mm, untempered	12.5 mm × 12.5 mm, tempered	12.5 mm × 12.5 mm, untempered
Temperature control of cuvette shaft		20 °C – 42 °C, smallest increment: 0.1 °C	
Emission wavelength I fluorescence			520 nm, bandwidth: 15 nm
Emission wavelength II fluorescence			560 nm, bandwidth: 40 nm
Excitation wavelength fluorescence			470 nm, bandwidth: 25 nm
Light path height	8.5 mm	8.5 mm	8.5 mm
Light source absorption	Xenon flash lamp	Xenon flash lamp	Xenon flash lamp
Light source fluorescence			LED
Measuring principle absorption	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam	Single-beam absorption spectrophotometer with reference beam
Measuring principle fluorescence			Confocal filter fluorometer with reference beam
Absorption measuring range	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)	0 A – 3.0 A (260 nm)
Fluorescence measuring range			0.5 nM – 2,000 nM fluorescein (emission wavelength 520 nm)
Method memory	> 100 method programs	> 100 method programs	> 100 method programs
Mode absorption	Spectrophotometer	Spectrophotometer	Spectrophotometer



Technical specifications			
Model	BioSpectrometer basic	BioSpectrometer kinetic	BioSpectrometer fluorescence
Mode fluorescence			Fluorometer
Operator guidance language	Spanish, Italian, French, English, German	Spanish, Italian, French, English, German	Spanish, Italian, French, English, German
Power consumption	Approx. 15 W during operating step Approx. 5 W with dimmed display	Approx. 30 W during operating step Approx. 5 W with dimmed display and temperature control switched off	Approx. 15 W during operating step Approx. 5 W with dimmed display
Random error absorption	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1	≤ 0.002 at A = 0 ≤ 0.005 (0.5 %) at A = 1
Random error fluorescence			± 2 % at 1 nM fluorescein (emission wavelength 520 nm)
Smallest step size	1 nm	1 nm	1 nm
Spectral bandwidth	≤ 4 nm	≤ 4 nm	≤ 4 nm
Systematic error	± 1 % (A = 1)	± 1 % (A = 1)	± 1 % (A = 1)
Wavelength range	200 nm – 830 nm	200 nm – 830 nm	200 nm – 830 nm

Ordering information		
Description	Catalog No.	List USD
Eppendorf BioSpectrometer® basic, 120 V/50 – 60 Hz (US JP TW)	6135000017	\$ 8,480.00
Eppendorf BioSpectrometer® kinetic, 120 V/50 – 60 Hz (US JP TW)	6136000010	10,300.00
Eppendorf BioSpectrometer® fluorescence, 120 V/50 – 60 Hz	6137000014	12,400.00
Eppendorf BioSpectrometer® Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6135928001	2,350.00
Eppendorf BioSpectrometer® Fluorescence Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®) and verifying fluorimetric precision (random error) and linearity	6137928009	3,980.00
Eppendorf µCuvette® G1.0 and Eppendorf BioSpectrometer® basic, 120 V/50 – 60 Hz	6135000923	9,910.00

i For more information go to www.eppendorf.com/photometry

Product appearance, specifications, and/or prices are subject to change without notice.



Eppendorf BioPhotometer® D30



Technical specifications	
Model	BioPhotometer D30
Display	5.7" VGA TFT display
Interfaces	USB master: for USB stick USB slave: for connecting to a PC Serial RS232 interface
Power supply	120 V, 50 – 60 Hz
Dimensions (W x D x H)	295 x 400 x 150 mm / 11.6 x 15.7 x 6 in
Weight w/o accessories	11.9 lb / 5.4 kg
Beam receiver absorption	CMOS photodiodes
Cuvette material	For measurements in the UV range: quartz glass or UV-transparent plastic (Eppendorf UVette®, 220 nm to 1,600 nm) For measurements in the visible range: glass or plastic For microvolume measurements: microvolume measuring cells such as the Eppendorf µCuvette® G1.0
Cuvette shaft	12.5 mm x 12.5 mm, untempered
Light path height	8.5 mm
Light source absorption	Xenon flash lamp
Measuring principle absorption	Single-beam absorption photometer with reference beam
Absorption measuring range	0 A – 3.0 A (260 nm)
Operator guidance language	Spanish, Italian, French, English, German
Power consumption	Approx. 15 W during operating step Approx. 5 W with dimmed display
Random error absorption	± 0.5 nm
Spectral bandwidth	≤ 4 nm
Systematic error	± 1 nm
Wavelengths	230, 260, 280, 320, 340, 405, 490, 562, 595, 600 nm

Ordering information		
Description	Catalog No.	List USD
Eppendorf BioPhotometer® D30, 120 V/50 – 60 Hz	6133000010	\$6,470.00
Eppendorf µCuvette® G1.0 and Eppendorf BioPhotometer® D30, 120 V/50 – 60 Hz	6133000940	8,090.00
Eppendorf BioPhotometer® D30 Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6133928004	2,410.00

Description
The Eppendorf BioPhotometer D30 is the 3rd generation of Eppendorf BioPhotometers, which have become an established standard in the field of life sciences. It utilizes fixed wavelengths, making the BioPhotometer D30 the ideal device for quick and precise routine applications. Ultra stable Xenon light source quickly lights up for immediate instrument use. Data is clearly processed making the evaluation of results fast and simple while minimizing mistakes. Additional help menus assist the user and offer an additional level of security. Relevant ratios are automatically determined for the corresponding applications.

The BioPhotometer D30 offers the option of recording purity scans for specific applications. In a defined measuring range, additional measurement data are collected and shown extrapolated, allowing contamination in the sample to be visually identified quickly.

- Product features**
- > Fixed wavelengths at 230 nm, 260 nm, 280 nm, 320 nm, 340 nm, 405 nm, 490 nm, 562 nm, 595 nm and 600 nm
 - > Display of purity scan for specific applications
 - > Preprogrammed applications for quick start
 - > Integrated application and results memory
 - > Data transfer via USB interface
 - > Direct print-out of results (Thermal Printer DPU-S445)
 - > Xenon flash lamp with very long life time
 - > Guided software process to minimize errors
 - > Help box with explanation of each individual step in 5 languages
 - > Compatible with microvolume measuring cells and standard cuvettes

- Applications**
- > Absorption measurements for one or more fixed wavelengths
 - > Display of purity scans for specific applications
 - > Applications with evaluations via factor, standard or standard series

i For more information go to www.eppendorf.com/photometry

Product appearance, specifications, and/or prices are subject to change without notice.





Eppendorf μCuvette® G1.0



Description
The Eppendorf μCuvette G1.0 microliter measuring cell is the perfect tool for measuring high concentrations in the smallest volumes. Higher sample concentrations require a shorter optical path length for measurements. With an optical path length of only 1 mm, the μCuvette G1.0 features a light path that is ten times shorter than the light path of standard cuvettes. This allows nucleic acid concentrations to be measured with high reproducibility in a much higher concentration range without prior dilution. Self-absorption of the μCuvette G1.0 is very low, meaning that the entire measuring range of the photometer can be used.

- Product features**
- > Microvolume measuring cell for measuring 1.5 - 10 μL sample volumes
 - > Low self-absorption (≤0.05 A @ 260 nm)
 - > Hydrophobic surface coating on quartz glass for precise droplet formation and positioning of the sample volume
 - > Simple cleaning to minimize the risk of sample carry-over
 - > Defined opened and closed positions of the microcuvette ensures consistent handling and reproducible results
 - > Compact and sturdy design emphasizes durability and longevity
 - > Exclusively available for Eppendorf BioPhotometer and Eppendorf BioSpectrometer

- Applications**
- > Concentration determination of nucleic acids and proteins
 - > Allows the measurement of highly concentrated samples without dilution
 - > Measuring samples of very low volume

i For more information go to www.eppendorf.com

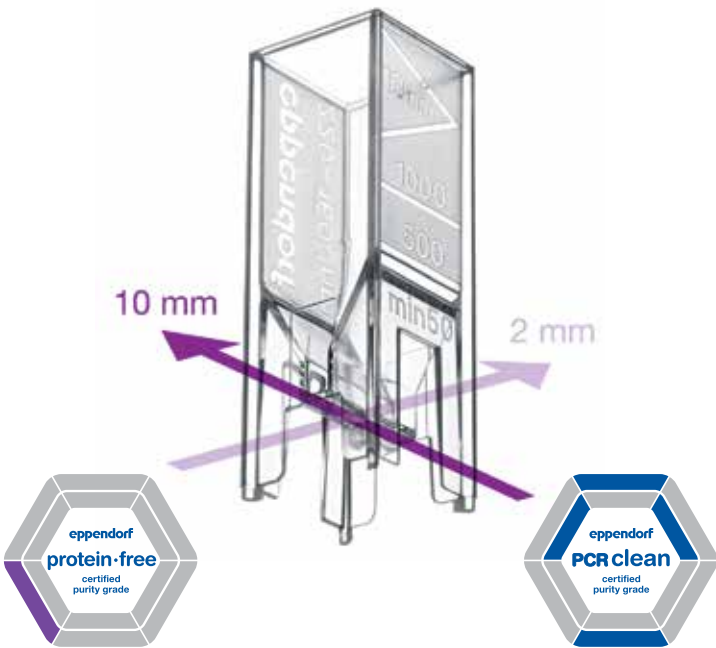


Technical specifications	
Model	Eppendorf μCuvette® G1.0
Dimensions (W × D × H)	12.5 × 12.5 × 48 mm
Coating	Hydrophobic surface coating
Cuvette blank	≤ 0.1 A @ 230 nm, ≤0.05 A @ 260 nm
Layer thickness	1 mm
Light path height	8.5 mm
Material	Quartz glass and aluminum
Minimum volume	1.5 μL dsDNA, 3 μL protein
Wavelength range	180 nm – 2,000 nm

Ordering information		
Description	Catalog No.	List USD
Eppendorf μCuvette® G1.0, Microvolume measuring cell for Eppendorf BioPhotometer and BioSpectrometer	6138000018	\$2,530.00
Eppendorf μCuvette® G1.0 and Eppendorf BioPhotometer® D30, 120 V/50 – 60 Hz	6133000940	8,090.00
Eppendorf μCuvette® G1.0 and Eppendorf BioSpectrometer® basic, 120 V/50 – 60 Hz	6135000923	9,910.00



UVette®



Description

The Eppendorf UVette® allows for measurements in the UV/Vis range with transparency from 220 nm to 1600 nm. Choose between two optical path lengths, 10 mm and 2 mm, with a single 90° rotation. This allows accurate absorbance measurements to be taken even for very concentrated samples without the need for dilution. The UVette is ideally matched for use with the Eppendorf BioPhotometer and BioSpectrometer. For use with other spectrophotometers, the UVette can be used with the aid of an adapter.

Applications

- > UV/Vis measurements from 220 to 1,600 nm
- > Concentration determination of nucleic acids, proteins and fluorescence signals

Product features

- > Suitable for measuring small volumes (≥50 µL)
- > UV and Vis-transparent between 220 nm and 1,600 nm
- > Two built-in optical path lengths in a single cuvette-just turn the UVette 90° to change from 10 mm and 2 mm
- > Volume markings for 500 µL and 1,000 µL
- > Deep lying optical window prevents scratches
- > Tapered cuvette base for optimal filling
- > Frosted grip for labeling
- > Ideal for use in the BioPhotometer and BioSpectrometer
- > Adapters available for use with other common spectrophotometers
- > Individually packaged and certified PCR clean and protein-free quality for sensitive (e.g. RNA) and valuable samples
- > Routine pack for convenient access to each UVette and safe storage in a reclosable box

i For more information go to www.eppendorf.com/photometry



Technical specifications	
Volume range	50 – 2,000 µL
Dimensions (W × D × H)	12.5 × 12.5 × 36 mm
Cuvette blank	0.5 A at 260 nm
Layer thickness	10 mm 2 mm
Light path height	8.5 mm
Material	UV-transparent plastic, free of fluoropolymers and other halogenated hydrocarbons
No. of optical windows	4
Wavelength range	220 – 1,600 nm

Ordering information

Description	Catalog No.	List USD
UVette® 220 nm – 1,600 nm, original Eppendorf plastic cuvette, individually packed, certified PCR-clean, (including RNase-free, DNase-free) and protein-free, 50 – 2,000 µL, 80 pcs.	952010051	\$127.60
UVette® starter set, 80 UVettes + 1 universal adapter for light path height of 15 mm and 8.5 mm, 50 – 2,000 µL	952010077	139.90
UVette® routine pack 220 nm – 1,600 nm, Eppendorf Quality™ degree of purity, reclosable box, 200 pcs.	952010069	214.40
Adapter for UVette®, for photometer/spectrophotometer with light path height 8.5 mm	952010107	66.50
10 mm	952010123	66.50
15 mm	952010115	66.50
20 mm	4099005004	66.50
Cuvette stand, for 16 cuvettes	940001102	35.00



Eppendorf Vis Cuvettes



- Product features**
- > Two different cuvette sizes (semi-micro and macro) for a wide variety of volumes and applications
 - > Disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm

- Applications**
- > Vis measurements from 300 nm to 900 nm
 - > Suitable for colorimetric protein assays, OD600, kinetic and fluorescence measurements

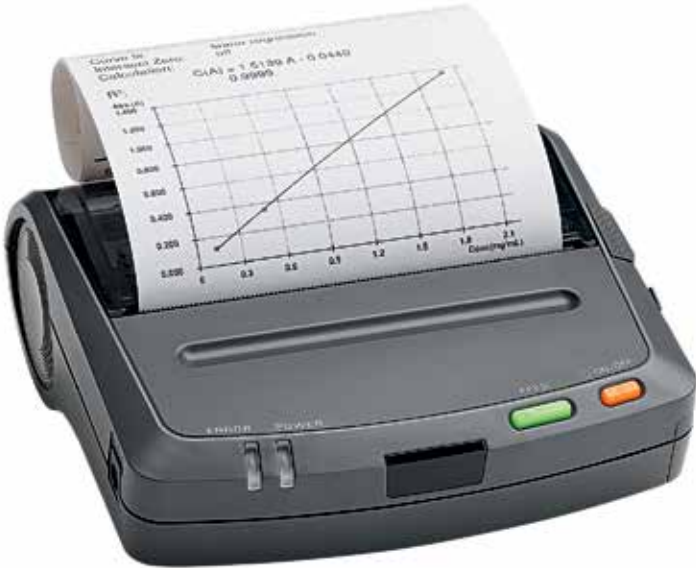
Description
The Eppendorf Vis Cuvettes are disposable cuvettes made of clear plastic with a light transmission of 300 nm to 900 nm. The Vis cuvettes are the perfect tool for applications outside of the UV range, for example, colorimetric protein assays (e.g., Bradford, Lowry, BCA), determining of the optical density of bacterial cultures (OD600 methods), kinetic and fluorescence measurements. Based on the volume you would like to measure, you can select semi-micro or macro cuvette.

Technical specifications		
Model	macro Vis Cuvette	semi-micro Vis Cuvette
Dimensions (W × D × H)	12.5 × 12.5 × 45 mm	12.5 × 12.5 × 45 mm
Cuvette blank	<0.045 A at 350 nm	<0.045 A at 350 nm
Layer thickness	10 mm	10 mm
Light path height	8.5 – 15 mm	8.5 – 15 mm
Maximum volume	4,500 µL	3,000 µL
Minimum volume	1,500 µL (in Eppendorf photometers) 2,500 µL (in devices from other manufacturers)	400 µL (in Eppendorf photometers) 1,500 µL (in devices from other manufacturers)
Wavelength range	300 – 900 nm	300 – 900 nm

Ordering information		
Description	Catalog No.	List USD
Eppendorf® macro Vis Cuvette, plastic cuvette for measurements in the Vis range, max. filling volume 4,500 µL, 10 x box of 100	0030079345	\$194.00
Eppendorf® semi-micro Vis Cuvette, plastic cuvette for measurements in the Vis range, max. filling volume 3,000 µL, 10 x box of 100	0030079353	207.40
Cuvette stand, for 16 cuvettes	940001102	35.00



Thermal Printer DPU-S445



Description
The Thermal Printer DPU-S445 is a thermal line dot printer with a high printing speed while producing a clear type face. This allows the Thermal Printer DPU-S445 to print out scanned images. As an alternative to using USB sticks, the automatic print-out function of the DPU-S445 printer can be used to quickly obtain the results. The printer is compatible with the BioPhotometer D30 and the BioSpectrometer product line.

- Product features**
- > Automatic print-out of results
 - > Easy and direct connection via USB
 - > Compact and light-weight (approx. 1.1 lb / 0.5 kg)
 - > Easy paper operation
 - > Max. printing speed: 90 mm/ sec.
 - > Number of dots/line: 832
 - > Resolution (dots/mm): 8

Ordering information		
Description	Catalog No.	List USD
Thermal Printer DPU-S445	6135010004	\$885.00
Thermal paper, 5 rolls	952010409	56.00

For more information go to www.eppendorf.com



Eppendorf BioSpectrometer® Reference Filter Sets



Description
The secondary UV/Vis BioSpectrometer Reference Filter Set is used to verify the photometric accuracy and wavelength systematic error. The reference filter is compatible with the BioSpectrometer basic and the BioSpectrometer kinetic.

Product features

- > Filter traceable to NIST®
- > Certificate with two-year period of validity
- > Filter recertification via Eppendorf (Please contact Eppendorf Technical Support for service)
- > Allows easy verification with preprogrammed inspection protocol in the device
- > Verification of wavelength accuracy and precision at 260 nm, 280 nm and 800 nm
- > Verification of the photometric accuracy and precision in the 260 nm to 800 nm range
- > The variation coefficient is listed along with the average value of 15 measurements.
- > Contains 7 filters (1 blank filter, 3 filters for checking the wavelength systematic error and precision, 3 filters for photometric verification)

Description
The BioSpectrometer Fluorescence Reference Filter Set is issued for verifying photometric accuracy, wavelength systematic error, and fluorimetric precision (random error) and linearity on the BioSpectrometer fluorescence.

Product features

- > All features of the BioSpectrometer UV/Vis Reference Filter Set
- > Additional filter for verifying fluorimetric precision (random error) and linearity
- > Inspection protocol preprogrammed in device
- > Contains 8 filters (1 blank filter, 3 filters for UV/Vis wavelength systematic error and precision, 3 filters for UV/Vis photometric verification, 1 filter for fluorometric verification)

Ordering information		
Description	Catalog No.	List USD
Eppendorf BioSpectrometer® Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6135928001	\$2,350.00
Eppendorf BioSpectrometer® Fluorescence Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®) and verifying fluorimetric precision (random error) and linearity	6137928009	3,980.00

i For more information go to www.eppendorf.com



Eppendorf BioPhotometer® D30 Reference Filter Set



Description
The secondary UV/Vis BioPhotometer D30 Reference Filter Set is issued for verifying the photometric accuracy and wavelength systematic error on the BioPhotometer D30.

Product features

- > Filter traceable to NIST®
- > Certificate with two year period of validity
- > Filter recertification via Eppendorf (contact: Eppendorf Service)
- > Verification of wavelength accuracy and precision at 260 nm and 280 nm
- > Verification of the photometric accuracy and precision for all BioPhotometer D30 wavelengths
- > Contains 6 filters (1 blank filter, 2 filters for checking wavelength systematic error and precision, 3 filters for photometric verification)

Ordering information		
Description	Catalog No.	List USD
Eppendorf BioPhotometer® D30 Reference Filter Set, filter set for verifying photometric accuracy and wavelength systematic error (according to NIST®)	6133928004	\$2,410.00

i For more information go to www.eppendorf.com/photometry



Photometry Performance Plans

Value of Service

A 2-year warranty comes with all BioPhotometers and BioSpectrometers. Choose an Extended Warranty, Essential Check, Advanced Maintenance, Premium Service, Flat Fee Repair Service, or Certification Service to ensure optimal performance of your instrument and to keep your system running smoothly for years to come.



Extended Warranty

Your new Eppendorf BioPhotometer or BioSpectrometer comes with a 2-year warranty which covers all parts and labor should the system ever need repair. After the warranty period is over¹ you may also purchase additional years of warranty coverage. Most systems are returned to our Service Center for repair and Field Service is available with a travel zone charge.

1-year Extended Warranty	Catalog No.	List USD
BioPhotometer plus/ BioPhotometer D30	901510650	\$ 762.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	901510733	1,169.00

¹ An extended warranty can be purchased during the manufacturer's warranty period. Instruments that are no longer under manufacturer's warranty require a Flat Fee Repair Service evaluation, before an extended warranty can be activated.

Advanced Maintenance

A one-time service event to ensure your BioPhotometer or BioSpectrometer operates at peak performance over the instrument's lifetime. This includes a visual check of the housing, cuvette shaft and display, cleaning and inspection of internal parts and light shaft, testing of printer output and USB port, photometer functionality (wavelength systematic error/precision and photometric accuracy/fluorescence test), and evaluation of stored data. Where applicable the following services are also included: software update, temperature verification and temperature adjustment. A check list is provided for documentation. Service travel applies only to BioPhotometers and BioSpectrometers in select markets.

Advanced Maintenance	Catalog No.	List USD
BioPhotometer plus/ BioPhotometer D30	0082110004	\$377.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	0082110014	595.00

Flat Fee Repair Service

A valued Service Center option is essential when a repair is needed for a system not covered under warranty or an extended warranty. For a single fee we will repair the instrument, complete a full preventive maintenance, repair any issues that may be found and include a full year warranty on the entire instrument. The instrument return shipment is also included.

Flat Fee Repair Service	Catalog No.	List USD
BioPhotometer plus/ BioPhotometer D30	901520066	\$1,609.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	901520076	2,486.00

Essential Check

An essential check of your BioPhotometer or BioSpectrometers allows for reliable system operation at peak performance over the instrument's lifetime. This includes a visual check of the housing, cuvette shaft and display, testing of printer output and USB port and self-test. A check list is provided for documentation. Service travel applies only to BioPhotometers and BioSpectrometers in select markets.

Flat Fee Repair Service	Catalog No.	List USD
BioPhotometer plus/ BioPhotometer D30	0082110003	\$200.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	0082110013	350.00

Certification

IQ—includes installation for optimal performance and reliability. This includes checking the condition of delivery packaging and the unpacked instrument, instrument set-up and initial operation. Documentation includes IQ report and certificate.

OQ—includes visual inspection of display and system testing. This also includes testing of printer output and USB port, photometer test (wavelength systematic error/precision and photometric accuracy/fluorescence test), evaluation of stored data and self-test. Where applicable the following services are also included: temperature verification, temperature adjustment and verification of operating parameters according to specifications. Documentation include OQ report and certificate. Service travel applies only to BioPhotometers and BioSpectrometers in select markets.

Installation Qualification (IQ)	Catalog No.	List USD
BioPhotometer plus/ BioPhotometer D30	0082110007	\$ 900.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	0082110017	900.00
Operational Qualification (OQ)		
BioPhotometer plus/ BioPhotometer D30	6132005018	554.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	6135005019	980.00
IQ/OQ		
BioPhotometer plus/ BioPhotometer D30	0082110009	1,169.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	0082110019	1,095.00
Filter Set Certification		
BioPhotometer filter set	901510999	564.00
BioSpectrometer filter set	6135931100	793.00



Premium Service

This comprehensive service includes a visual check of the housing, cuvette shaft and display, cleaning and inspection of internal parts and light shaft, testing of printer output and USB port, photometer test (wavelength systematic error/precision and photometric accuracy/fluorescence test), evaluation of stored data and self-test. A check list is provided for documentation. Quality tested Eppendorf original spare parts will be exchanged when necessary. Premium service includes the cost of parts, labor, loaner instrument and case, and shipping or service travel for any repair on the instrument. Service travel applies only to BioPhotometers and BioSpectrometers in select markets.

Premium Service	Catalog No.	List USD
BioPhotometer plus/ BioPhotometer D30	0082110005	\$1,800.00
BioSpectrometer basic/ BioSpectrometer kinetic/ BioSpectrometer fluorescence	0082110015	2,700.00





Eppendorf Eporator®



USB interface on the Eporator

Description

The Eppendorf Eporator® is a compact instrument designed for fast and controlled electroporation of bacteria, yeasts and other microorganisms. The instrument features an intuitive operation and user-friendly programming of standard methods. Experimental data can easily be exported and documented using its USB port.

Product features

- > Faster sample handling: simple one-button operation
- > Maximum safety via integrated cuvette holder
- > Self-explanatory operation guided by display indicators
- > Fast, freely programmable softkeys for saving and accessing the 2 most frequently used parameters
- > Compact, space-saving design
- > USB interface for data transfer
- > GLP-compliant documentation

Technical specifications	
Interfaces	USB 2.0
Dimensions (W x D x H)	7.5 x 10.8 x 4.9 in / 19 x 27.5 x 12.5 cm
Weight w/o accessories	7.1 lb / 3.2 kg
Capacitor	10 Microfarad
Pulse form	Exponentially decreasing
Pulse voltage	200 – 2500 V
Resistance	600 Ohm
Special features	Electronic protective circuit to prevent arcs
Time constant	Nominal 5 ms

Applications

- > Transformation of bacteria, yeast or microorganisms with an optimum transformation efficiency of up to 1.8×10^{10} transformant cells per µg of DNA
- > Mainly for delivery of plasmid DNA, but also RNA, proteins and other small molecules

Ordering information

Description	Catalog No.	List USD
Eppendorf Eporator®, for bacteria and yeasts, 120 V/50 – 60 Hz (US)	4309000027	\$2,540.00
Cuvette stand, for 16 cuvettes	940001102	35.00

i For more information go to www.eppendorf.com



Eppendorf TransferMan® 4r



The easily adjustable working angle can be set from 0° to 90°



Ergonomic setup of CellTram Air, CellTram vario and TransferMan 4r with DualSpeed joysticks

Description

The user-friendly TransferMan® 4r possesses an ergonomic and innovative design to meet the most demanding micromanipulation requirements. Smart functions, such as improved automated home function and position storage, enable simple and fast execution of even the most complex micromanipulation techniques. The new DualSpeed™ joystick allows for precise and intuitive movement in all three dimensions, dynamic movement for covering longer distances and position memory for speeding up sample processing. The TransferMan 4r is ideal for manipulation of oocytes and early embryos, transfer of stem cells and microparticles, and a wide range of applications in reproductive biology. Application-specific user profiles simplify the individual workflow process with four pre-defined protocols to choose from known as application masks, (e.g., for cell transfer, DNA injection, etc). The freely programmable “My app” mask can be optimized for specific individual needs. The TransferMan 4r is for research use only.

Applications

- > Micromanipulation of oocytes and early embryos
- > ES and iPS cell transfer
- > Nuclear transfer
- > Production of transgenic animals using pronuclear and cytoplasmic injection (e.g., CRISPR/Cas, TALEN)
- > Selection of individual cells (e.g., biopsies)
- > Positioning and selection of microparticles
- > Microdissection of chromosomes, etc.

Product features

- > Unique DualSpeed™ joystick for precise and instantaneous movement control
- > Maximum stability ensures vibration-free work
- > One-hand operation for capillary and angle settings
- > Programmable Z-axis limit for preventing capillary breakage
- > Connection with Eppendorf PiezoXpert® and electronic microinjectors FemtoJet® 4i/4x
- > Can be adapted to all conventional microscopes
- > PC interface for remote control

1. Precise, instantaneous control and positioning in all spatial dimensions via unique DualSpeed™ joystick

2. Simple and quick capillary and sample change using automated Home function

3. Selection and programming of advanced functions (e.g., memory for up to 5 positions, limit, y-off)
4. Optimized user interface for various applications and simplification of workflow

5. Ergonomic control panel for fatigue free work

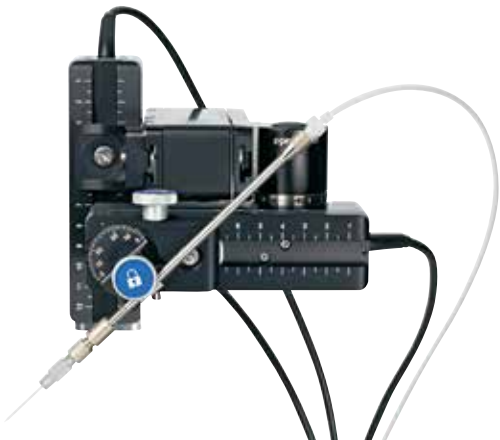
6. Comfortable, individual speed adjustment

7. PC interface for remote control

Eppendorf TransferMan® 4r



Workstation for DNA/RNA microinjection into zygotes - TransferMan 4r mounted on Zeiss® Axio Vert.A1



Motor modules of the TransferMan 4r with mounted capillary holder

Technical specifications	
Motor module	
Max. traveling distance	≥ 20 mm
Weight (complete)	4.74 lb / 2.15 kg
Stepper motor	X-, Y-, Z-module
Module (X, Y, Z)	
Step size	< 20 nm (computational resolution)
Speed	0 – 10,000 µm/s
Mechanical adjustability	> 80 mm
Dimensions	5.0 x 2.0 x 1.4 in / 129 mm x 51 mm x 36 mm
Weight	570 g
Swivel joint	
Direction of rotation	-45° – +90°
Capillary exchange	Direction of rotation: forward
Sample replacement	Direction of rotation: backward
Angle head	
Operating angle	0° – 90°
Control board	
Control	Joystick
Dimensions (W x H x D)	8.1 x 11.3 x 6.0 in / 205 mm x 288 mm x 152 mm
Weight (incl. mains/power supply device)	4.0 lb / 1.8 kg
Working area	coarse, fine, x-fine
External Device/PC	Serial interface SUBD9, male
Joystick	
Speed control	Proportional and dynamic kinetics

i For more information go to www.eppendorf.com

Ordering information

Description	Catalog No.	List USD
Eppendorf TransferMan® 4r, micromanipulator with DualSpeed™ joystick for direct and dynamic movement control, 120 V/50 – 60 Hz	5193000020	\$18,400.00

Adapters for the InjectMan® 4, TransferMan® 4r

Description	Catalog No.	List USD
Adapter Leica® 1, for Eppendorf micromanipulators, for Leica® DMI8, DMI3000 B, 3000 M, 4000 B, 5000 B, 5000 M, 6000 B, DM IRB E, HC, and DM IRE 2 microscopes	5192301000	\$800.00
Adapter Leica® 2, for Eppendorf micromanipulators, for Leica® DM IL LED and HC microscopes	5192302007	800.00
Adapter Nikon® 1, for Eppendorf micromanipulators, for Nikon® Eclipse® Diaphot 200, 300 and Eclipse® Ti-E, Ti-U, Ti-S, TE200, TE300, TE2000 microscopes	5192316008	935.00
Adapter Olympus® 1, for Eppendorf micromanipulators, for Olympus® IX50, IX51, IX70, IX71, IX80, and IX81 microscopes	5192306002	800.00
Adapter Olympus® 2, for Eppendorf micromanipulators, for microscopes of Olympus® IX3 series with illumination column IX3-ILL	5192307009	800.00
Adapter Olympus® 3, for Eppendorf micromanipulators, for microscopes of Olympus® IX3 series with illumination IX2-ILL30	5192308005	800.00
Adapter Zeiss® 1, for Eppendorf micromanipulators, for Zeiss® Axiovert® 200 and AxioObserver A1, D1, and Z1 microscopes	5192311006	800.00
Adapter Zeiss® 2, for Eppendorf micromanipulators, for Zeiss® Axio Vert.A1 microscope	5192312002	935.00
Universal stand, for mounting Eppendorf micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used	5192325007	975.00
Adapter bridge, for mounting Eppendorf micromanipulators on microscope adapters for TransferMan® NK 2, InjectMan® NI 2 and PatchMan NP 2	5192321001	540.00

Accessories

Description	Catalog No.	List USD
Tube adapter (2 pieces), for tubes with an outer diameter of 2 mm or 3 mm	5194075407	\$ 71.00
Positioning aid, pack of 2, for mounting and re-positioning universal capillary holder on TransferMan® 4r and InjectMan® 4	5192072001	117.00
Spare parts kit	5192071005	120.00
Headstage holder	5192073008	129.00
Foot control, for Eppendorf micromanipulators	920005799	180.00
Connection cable, for connecting TransferMan® 4r/InjectMan® 4 to FemtoJet® 4i/4x	5192082007	93.30
Connection cable, for connecting Eppendorf micromanipulators with FemtoJet® and FemtoJet® express	920005845	112.00
Connection cable, for connecting Eppendorf micromanipulators with PC or Eppendorf PiezoXpert®	920005837	214.00
Y-cable FJ4, Y-cable for connecting FemtoJet® 4i/4x with a PC and TransferMan® 4r or InjectMan® 4	5192080004	155.00
Y-cable PX, Y-cable for connecting Eppendorf PiezoXpert® or a PC with TransferMan® 4r or InjectMan® 4 and FemtoJet® 4i/4x	5192081000	155.00

Eppendorf InjectMan® 4



InjectMan 4 micromanipulator mounted for axial injection



Safe and simple capillary exchange

Description

The InjectMan 4 is ideal for microinjection into adherent cells, smaller organisms and embryos in the early stages of development. In combination with the FemtoJet 4i or 4x, it enables fast semi-automatic injection. Furthermore, the InjectMan 4 is the ideal micromanipulator for all complex applications that require a dynamic movement mode and direct control of the injection process via the joystick button. The axial injection movement ensures the optimal protection of sensitive cells and lowest possible mortality rate. The high penetration speed makes injection into rigid structures easier than ever. The new user interface with four pre-defined application templates facilitates the individual workflow process (e.g., for adherent cell injection, microinjection into fish larvae, etc.). The freely programmable “My app” template can be optimized for specific individual needs. Due to its exceptional precision and position stability, the InjectMan 4 is highly suited for electrophysiology applications, like patch clamping. The motor modules can be uncoupled electronically to prevent accidental movement of the micropipette.

Product features

- > Maximum stability ensures drift-free work
- > Selection and programming of advanced functions (e.g. axial movement, step injection)
- > Ergonomically shaped control panel for fatigue-free work
- > Easy and precise angle adjustment
- > Electronic coupling to FemtoJet 4i/x microinjectors for fast serial semi-automatic injections with high reproducibility
- > Connection with Eppendorf PiezoXpert for piezo-assisted penetration over a pre-defined distance
- > Can be adapted to all conventional microscopes
- > PC interface for remote control

Applications

- > Semi-automatic microinjection into adherent cells
- > Serial microinjection into fish larvae, frog eggs, insect embryos, etc.
- > Injection into living plant cells, *C. elegans* and other roundworms and flatworms
- > Automatic dispensing of cell suspensions or solutions
- > Stable, drift-free positioning, e.g. for electrophysiology techniques

1. Dynamic movement control via unique joystick

2. Simple and quick capillary and sample change via swivel-mounted modules and automated Home function

3. Programmable injection levels and Z-axis limit for preventing capillary breakage
4. Comfortable, individual speed adjustment

5. Option to connect with Eppendorf FemtoJet® 4i/x microinjectors for semi-automated axial injection

6. Optimized user interface for various applications and maximum versatility

i For more information go to www.eppendorf.com



Eppendorf InjectMan® 4



Workstation for adherent cell injection - InjectMan 4 mounted on Zeiss® Axio Vert.A1



Workstation for injection into fish embryos - InjectMan 4 and FemtoJet setup next to Olympus® SZX16

Technical specifications	
Motor module	
Max. traveling distance	≥ 20 mm
Weight (complete)	4.74 lb / 2.15 kg
Stepper motor	X-, Y-, Z-module
Module (X, Y, Z)	
Step size	< 20 nm (computational resolution)
Speed	0 – 10,000 µm/s
Mechanical adjustability	> 80 mm
Dimensions	5.0 x 2.0 x 1.4 in / 129 mm x 51 mm x 36 mm
Weight	570 g
Swivel joint	
Direction of rotation	-45° – +90°
Capillary exchange	Direction of rotation: forward
Sample replacement	Direction of rotation: backward
Angle head	
Operating angle	0° – 90°
Control board	
Control	Joystick
Dimensions (W x H x D)	8.1 x 11.3 x 6.0 in / 205 mm x 288 mm x 152 mm
Weight (incl. mains/power supply device)	4.0 lb / 1.8 kg
Working area	Coarse, fine, x-fine
External Device/PC	Serial interface SUBD9, male

i For more information go to www.eppendorf.com



Ordering information

Description	Catalog No.	List USD
Eppendorf InjectMan® 4, micromanipulator with dynamic movement control, 120 V/50 – 60 Hz	5192000027	\$17,800.00

Adapters for the InjectMan® 4, TransferMan® 4r

Description	Catalog No.	List USD
Adapter Leica® 1, for Eppendorf micromanipulators, for Leica® DMI8, DMI3000 B, 3000 M, 4000 B, 5000 B, 5000 M, 6000 B, DM IRB E, HC, and DM IRE 2 microscopes	5192301000	\$800.00
Adapter Leica® 2, for Eppendorf micromanipulators, for Leica® DM IL LED and HC microscopes	5192302007	800.00
Adapter Nikon® 1, for Eppendorf micromanipulators, for Nikon® Eclipse® Diaphot 200, 300 and Eclipse® Ti-E, Ti-U, Ti-S, TE200, TE300, TE2000 microscopes	5192316008	935.00
Adapter Olympus® 1, for Eppendorf micromanipulators, for Olympus® IX50, IX51, IX70, IX71, IX80, and IX81 microscopes	5192306002	800.00
Adapter Olympus® 2, for Eppendorf micromanipulators, for microscopes of Olympus® IX3 series with illumination column IX3-ILL	5192307009	800.00
Adapter Olympus® 3, for Eppendorf micromanipulators, for microscopes of Olympus® IX3 series with illumination IX2-ILL30	5192308005	800.00
Adapter Zeiss® 1, for Eppendorf micromanipulators, for Zeiss® Axiovert® 200 and AxioObserver A1, D1, and Z1 microscopes	5192311006	800.00
Adapter Zeiss® 2, for Eppendorf micromanipulators, for Zeiss® Axio Vert.A1 microscope	5192312002	935.00
Universal stand, for mounting Eppendorf micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used	5192325007	975.00
Adapter bridge, for mounting Eppendorf micromanipulators on microscope adapters for TransferMan® NK 2, InjectMan® NI 2 and PatchMan NP 2	5192321001	540.00

Accessories

Description	Catalog No.	List USD
Tube adapter (2 pieces), for tubes with an outer diameter of 2 mm or 3 mm	5194075407	\$ 71.00
Positioning aid, pack of 2, for mounting and re-positioning universal capillary holder on TransferMan® 4r and InjectMan® 4	5192072001	117.00
Spare parts kit	5192071005	120.00
Headstage holder	5192073008	129.00
Foot control, for Eppendorf micromanipulators	920005799	180.00
Connection cable, for connecting TransferMan® 4r/InjectMan® 4 to FemtoJet® 4i/4x	5192082007	93.30
Y-cable FJ4, Y-cable for connecting FemtoJet® 4i/4x with a PC and TransferMan® 4r or InjectMan® 4	5192080004	155.00
Y-cable PX, Y-cable for connecting Eppendorf PiezoXpert® or a PC with TransferMan® 4r or InjectMan® 4 and FemtoJet® 4i/4x	5192081000	155.00



Eppendorf PiezoXpert®



Applications

- > Transfer of embryonic or induced pluripotent stem cells into blastocysts or morulae
- > Mouse ICSI (Intracytoplasmic Sperm Injection)
- > Enucleation/nucleus transfer
- > Blastomere biopsy from mouse embryos
- > Biopsy of equine embryos for Preimplantation Genetic Diagnosis (PGD)
- > RNA/DNA injection into fertilized oocytes of mammals

Product features

- > Intuitive operation allows for fast and simple sample processing
- > Reproducible parameter settings
- > Program keys to save your experimental parameters
- > Trigger impulses with an ergonomic foot control or rotary knobs right on the device
- > Optical feedback of triggered impulses
- > Additional “Clean” function for simple removal of debris on the outside of the capillary



Technical specifications	
Interfaces	USB (for technical service), RS-232 (connection to foot control)
Power supply	120 V, 50 – 60 Hz
Max. power consumption	18 W
Dimensions (W x D x H)	6.7 x 9.1 x 4.5 in / 17 x 23 x 11.5 cm
Weight w/o accessories	6.2 lb / 2.8 kg
Piezo impulse	
Intensity (of piezo impulses)	1 – 50 (1 – 22 adjustable in increments of 1, 22 – 50 adjustable in increments of 4)
Number (number of piezo impulses)	1 – 10, ∞ (1 – 10 adjustable in increments of 1)
Speed (frequency of piezo impulses/sec)	1 – 40 (1 – 40 adjustable in increments of 1, 1 – 10: 1 Hz per increment, 10 – 20: 2 Hz per increment, 20 – 34: 5 Hz per increment, 34 – 40: 25 Hz per increment)
Clean function	
Intensity (of piezo impulses)	1 – 86 (1 – 22 adjustable in increments of 1, 22 – 86 adjustable in increments of 4)
Speed (frequency of piezo impulses/sec)	1 – 40 (1 – 40 adjustable in increments of 1, 1 – 10: 1 Hz per increment, 10 – 20: 2 Hz per increment, 20 – 34: 5 Hz per increment, 34 – 40: 25 Hz per increment)

Ordering information		
Description	Catalog No.	List USD
Eppendorf PiezoXpert®, for piezo-assisted micromanipulation, incl. actuator, foot control and spacer plate, 120 V/50 – 60 Hz	5194000024	\$14,100.00
Grip head 0, for microcapillaries with 1.0 to 1.1 mm outer diameter, 2 pieces	920007414	157.00
VacuTip, holding capillary, 35° tip angle, 15 µm inner diameter, 1 mm flange, sterile, set of 25 ¹⁾	930001015	410.00
VacuTip FCH, holding capillary, 25° tip angle, 60 µm inner diameter, 0.5 mm flange, sterile, set of 25 ¹⁾	5175240006	420.00
Piezo Drill Tip Mouse ICSI, for piezo-assisted mouse ICSI, 25° tip angle, 6 µm inner diameter, 6 mm flange, sterile, set of 25	930001091	515.00
Piezo Drill Tip ES, for piezo-assisted mouse ES cell transfer, 25° tip angle, 15 µm inner diameter, 6 mm flange, sterile, set of 25	930001104	515.00

¹⁾ This product is registered in the European Union as medical device (according to Medical Device Directive 93/42/EEC).

Description

The Eppendorf PiezoXpert provides piezo-assisted micromanipulation, enabling simple penetration of cells for microinjection or micromanipulation. Perforation of the cell membrane is supported by piezo impulses which are directly transferred to the capillary without any loss of intensity. Piezo-assisted micromanipulation improves the results of a variety of applications including transfer of embryonic or induced pluripotent stem cells into blastocysts and morulae, injection into mammalian oocytes and zygotes, and enucleation/nuclear transfer. The Eppendorf PiezoXpert forms the perfect system with Eppendorf micromanipulators, but it integrates just as easily with non-Eppendorf micromanipulation systems. The Eppendorf PiezoXpert is for research use only.



Eppendorf PiezoXpert actuator mounted onto TransferMan 4r

i For more information go to www.eppendorf.com





Workstations for Microinjection and Micromanipulation



Workstation for manipulation of suspension cells and related techniques

- Recommended setup:
- 2 × TransferMan® 4r
 - 1 × Microscope adapter (to be specified at time of order)
 - 1 × CellTram® Air
 - 1 × CellTram® vario
 - 1 × set of 25 VacuTips
 - 1 × set of 25 TransferTip® microcapillaries (to be specified at time of order)

- Optional for piezo-assisted micromanipulation:**
- 1 × Eppendorf PiezoXpert
 - 1 × set of 25 Piezo Drill Tips (to be specified at time of order)



Workstation for adherent cell injection or injection into *Drosophila*, *C.elegans*, plant cells etc.

- Recommended setup:
- 1 × InjectMan® 4
 - 1 × Microscope adapter (to be specified at time of order)
 - 1 × FemtoJet® 4i or FemtoJet® 4x
 - 2 × racks of 96 Microloader
 - 1 × Eppendorf Cell Imaging Dishes



Workstation for generation of transgenic animals using pronuclear injection

- Recommended setup:
- 2 × TransferMan® 4r
 - 1 × Microscope adapter (to be specified at time of order)
 - 1 × CellTram® Air
 - 1 × FemtoJet® 4i or FemtoJet® 4x
 - 1 × set of 25 VacuTips
 - 2 × racks of 96 Microloader

- Optional for piezo-assisted micromanipulation:**
- 1 × Eppendorf PiezoXpert®
 - 1 × Y cable PX



Workstation for injection into fish embryos

- Recommended setup:
- 1 × InjectMan 4
 - 1 × Universal stand
 - 1 × FemtoJet® 4x
 - 2 × racks of 96 Microloader

- Optional for piezo-assisted injection:**
- Recommended setup:
- 1 × Eppendorf PiezoXpert®
 - 1 × Y cable PX



Eppendorf TransferMan® 4m



Workstation for cell transfer - TransferMan 4m mounted on Olympus® IX73



The TransferMan® 4m is designed to ensure optimal results for a wide range of micromanipulation applications.

Description

The innovative and user-friendly TransferMan 4m continues Eppendorf’s 20-year-long tradition of quality and reliability in the field of IVF. It has been designed for intuitive operation and optimal performance for a variety of applications in human reproductive medicine. With its exceptionally direct transmission of movement in all directions, the TransferMan 4m provides a “real time feel” for the user without any recognizable latency. Its DualSpeed™ joystick features a dynamic speed mode for covering longer distances or speeding up sample processing.

The TransferMan 4m is registered in the European Union as a medical device (according to Medical Device Directive 93/42/EEC). The TransferMan 4m is classified in the United States as an assisted reproduction micromanipulator and microinjector medical device under 21 CFR 884.6150. For availability in your country, please contact your local sales organization.

Product features

- > Unprecedented direct transmission of movement without any recognizable latency
- > Unique DualSpeed™ joystick for precise and instantaneous movement control
- > One-hand operation for capillary and angle settings
- > Programmable Z-axis limit for preventing capillary breakage
- > Maximum stability ensures vibration-free work
- > Can be adapted to all conventional microscopes

Technical specifications	
Motor module	
Max. traveling distance	≥ 20 mm
Weight (complete)	4.7 lb / 2.15 kg
Stepper motor	X-, Y-, Z-module
Module (X, Y, Z)	
Step size	< 20 nm (computational resolution)
Speed	0 – 10,000 µm/s
Mechanical adjustability	> 80 mm
Dimensions	5.0 x 2.0 x 1.4 in / 129 mm x 51 mm x 36 mm
Weight	1.3 lb / 570 g

i For more information go to www.eppendorf.com



Technical specifications	
Swivel joint	
Direction of rotation	-45° – +90°
Capillary exchange	Direction of rotation: forward
Sample replacement	Direction of rotation: backward
Angle head	
Operating angle	0° – 90°
Control board	
Control	Joystick
Dimensions (W x H x D)	8.1 x 11.3 x 6.0 in / 205 mm x 288 mm x 152 mm
Weight (incl. mains/power supply device)	4.0 lb / 1.8 kg
Working area	Coarse, fine, x-fine
External Device/PC	Serial interface SUBD9, male
Joystick	
Speed control	Proportional and dynamic kinetics



Workstation for assisted reproduction technology (ART)
Recommended setup:
2 x TransferMan® 4m
1 x Microscope adapter (to be specified at time of order)
1 x CellTram® Air
1 x CellTram® vario
1 x set of 25 VacuTips
1 x set of 25 TransferTip® microcapillaries (to be specified at time of order)

Ordering information

Description	Catalog No.	List USD
Eppendorf TransferMan® 4m, micromanipulator with DualSpeed™ joystick for direct and dynamic movement control; control board, motor modules, angle head, swivel joint and YZ connector, 120 V/50 – 60 Hz, ¹⁾	5191000023	\$19,470.00

¹⁾ The TransferMan® 4m is registered in the European Union as a medical device (according to Medical Device Directive 93/42/EEC). The TransferMan 4m is classified in the United States as an assisted reproduction micromanipulator and microinjector medical device under 21 CFR 884.6150. For availability in your country, please contact your local sales organization.



Microscope Adapters for Micromanipulators



Description
Eppendorf microscope adapters enable the simple installation of the TransferMan® 4r or InjectMan™ 4 on all conventional inverted microscopes manufactured by Leica®, Nikon®, Olympus® and Zeiss®.



Description
The Universal Stand can be used for mounting TransferMan 4r and InjectMan 4 micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used. With its magnetic foot the Universal stand can be firmly fixed to any ferromagnetic base (plate or table).

Ordering information		
Description	Catalog No.	List USD
Adapter Leica® 1, for Eppendorf micromanipulators, for Leica® DMI8, DMI3000 B, 3000 M, 4000 B, 5000 B, 5000 M, 6000 B, DM IRB E, HC, and DM IRE 2 microscopes	5192301000	\$800.00
Adapter Leica® 2, for Eppendorf micromanipulators, for Leica® DM IL LED and HC microscopes	5192302007	800.00
Adapter Nikon® 1, for Eppendorf micromanipulators, for Nikon® Eclipse® Diaphot 200, 300 and Eclipse® Ti-E, Ti-U, Ti-S, TE200, TE300, TE2000 microscopes	5192316008	935.00
Adapter Olympus® 1, for Eppendorf micromanipulators, for Olympus® IX50, IX51, IX70, IX71, IX80, and IX81 microscopes	5192306002	800.00
Adapter Olympus® 2, for Eppendorf micromanipulators, for microscopes of Olympus® IX3 series with illumination column IX3-ILL	5192307009	800.00
Adapter Olympus® 3, for Eppendorf micromanipulators, for microscopes of Olympus® IX3 series with illumination IX2-ILL30	5192308005	800.00
Adapter Zeiss® 1, for Eppendorf micromanipulators, for Zeiss® Axiovert® 200 and AxioObserver A1, D1, and Z1 microscopes	5192311006	800.00
Adapter Zeiss® 2, for Eppendorf micromanipulators, for Zeiss® Axio Vert.A1 microscope	5192312002	935.00
Universal stand, for mounting Eppendorf micromanipulators on upright microscopes and stereo microscopes independent of the microscope tripod used	5192325007	975.00
Adapter bridge, for mounting Eppendorf micromanipulators on microscope adapters for TransferMan® NK 2, InjectMan® NI 2 and PatchMan NP 2	5192321001	540.00

i For more information go to www.eppendorf.com



Antivibration Pad



Description
The antivibration pads are specifically designed to effectively protect your micromanipulation system against external vibrations. The pads are directly positioned under the base points of your microscope. Five different sizes are available, from XS to XL. The various pads are optimized for specific load ranges to guarantee optimal results. A selection of pads specifically chosen for each microscope ensures effective protection for your workstation.

- Product features**
- > Effectively protects micromanipulation workstations from external vibrations
 - > Five different formats available
 - > Different formats can be combined for optimal adjustment

Ordering information		
Description	Catalog No.	List USD
Antivibration Pad XS, weight range 9.9 – 13.2 lb / 4.5 – 6.0 kg	920007945	\$580.00
Antivibration Pad S, weight range 13.2 – 17.6 lb / 6.0 – 8.0 kg	920007953	580.00
Antivibration Pad M, weight range 17.6 – 22 lb / 8.0 – 10.0 kg	920007961	580.00
Antivibration Pad L, weight range 22 – 27.6 lb / 10.0 – 12.5 kg	920007970	580.00
Antivibration Pad XL, weight range 27.6 – 36.4 lb / 12.5 – 16.5 kg	920007988	580.00

It is decisive to take into account the total weight of your microscope, including the mounted accessories, and the load distribution of the individual contact points.



CellTram® Air/Oil/vario



Applications CellTram® Air

- > Gentle holding of larger suspension cells e.g., oocytes and blastocysts
- > Manual microinjection and dispensing of aqueous solutions

CellTram® Air

- > Oil-free system with optimized resolution for holding of suspension cells
- > Simple setting of operating point via pressure compensation
- > Extremely simple operation because no oil filling is required
- > Maintenance-free piston/cylinder system with minimal friction force
- > Large, ergonomic rotary knob
- > Stable and secure base plate
- > Universal capillary holder for assembly onto all conventional micromanipulators



Applications CellTram® Oil

- > Aspiration and dispensing of small cells (e.g., mouse sperm)
- > Manual microinjection under high pressure (e.g., into plants)

CellTram® Oil

- > QuickValve system for quick and simple filling
- > Maximum pressure 20,000 hPa
- > Large, ergonomic rotary knob
- > Stable and secure base plate
- > Universal capillary holder for assembly onto all conventional micromanipulators



Applications CellTram® vario

- > Transfer of organelles (e.g., nucleus transfer)
- > Removal of cells (e.g., microdissection), biopsies
- > Aspiration and dispensing of small cells (e.g., ES cells, mouse sperm)

CellTram® vario

- > Two rotary knobs of variable transmission ratio (1:1 and 1:10) for the highest standards in terms of resolution, sensitivity and response behavior
- > QuickValve system for fast and simple filling
- > Large, ergonomic rotary knobs
- > Stable and secure base plate
- > Universal capillary holder for assembly onto all conventional micromanipulators



QuickValve system

With the QuickValve system, filling of the CellTram vario and CellTram Oil is quick and easy. A special valve screw allows the oil to be filled directly into the piston chamber. The optimized piston/cylinder system minimizes friction in the piston chamber, providing highest reliability and ultrafine sensitivity.

Technical specifications			
Model	CellTram Air	CellTram Oil	CellTram vario
Max. pressure	2,900 hPa	20,000 hPa	20,000 hPa
Minimum volume that can be set	< 200 nL	< 20 nL	<20 nL/<2 nL (coarse/fine)
Pressure generation	Piston/cylinder system, filled with air, maintenance-free	Piston/cylinder system, filled with oil	Piston/cylinder system, with gear, filled with oil
Total volume that can be set	2,640 µL	960 µL	960 µL
Volume change per revolution	88 µL	9.6 µL	9.6 µL/960 nL (coarse/fine)

Ordering information

Description	Catalog No.	List USD
CellTram® Air , pneumatic, manual microinjector, complete with pressure tube and universal capillary holder with grip head for capillaries with an outer diameter of 1 mm ¹⁾	5176000068	\$2,270.00
CellTram® Oil , hydraulic, manual microinjector, complete with pressure tube, filling tube, oil and universal capillary holder with grip head for capillaries with an outer diameter of 1 mm ¹⁾	5176000076	2,550.00
CellTram® vario , hydraulic, manual microinjector with gear, complete with pressure tube, filling tube, oil and universal capillary holder with grip head for capillaries with an outer diameter of 1 mm ¹⁾	5176000084	2,990.00
O-Ring set , for grip heads 0 to 3 with removal tool	920005870	56.50
Positioning aid , pack of 2, for mounting and re-positioning universal capillary holder on TransferMan® 4r and InjectMan® 4	5192072001	117.00
Pressure tube , for connecting CellTrams to universal capillary holder, 1 m	920002081	79.00
Service kit , for grip heads and capillary holder, consisting of O-ring set and adapter for Femtotips®	920005888	147.00
Grip head 1 , for microcapillaries with 1.2 to 1.3 mm outer diameter, 2 pieces	920007708	157.00
Grip head 2 , for microcapillaries with 1.4 to 1.5 mm outer diameter, 2 pieces	920007716	157.00
Grip head 3 , for microcapillaries with 0.7 to 0.9 mm outer diameter, 2 pieces	920007724	157.00
Grip head 0 , for microcapillaries with 1.0 to 1.1 mm outer diameter, 2 pieces	920007414	157.00
Universal capillary holder , for mounting Femtotips®, Femtotip II or grip heads, incl. grip head 0, adapter for Femtotips® and replacement O-rings	920007392	375.00

¹⁾ This product is registered in the European Union as medical device (according to Medical Device Directive 93/42/EEC).

i For more information go to www.eppendorf.com





FemtoJet® 4i and FemtoJet® 4x



1. User-friendly operation menu for routine tasks
2. Programmable injection guarantees high reproducibility
3. Inject and Clean function can be triggered right on the device or using the included foot control or optional hand control
4. Connection to InjectMan® 4 or TransferMan® 4r enables semi-automatic microinjection
5. Small footprint
6. Independent pressure supply with built-in compressor (FemtoJet 4i only)
7. Especially well suited for serial injection volumes covering the range from femtoliters to microliters

i For more information go to www.eppendorf.com



FemtoJet® 4i



Description
The electronic microinjector, FemtoJet 4i, with its simple operation and wide range of functionality is ideally suited for injecting small to intermediate volumes of up to 100 pL into adherent cells and suspension cells. The FemtoJet 4i with a built-in compressor forms a perfect team with Eppendorf micromanipulators, and it integrates just as easily with non-Eppendorf micromanipulator systems. The electronic connection between FemtoJet 4i and TransferMan® 4r and InjectMan® 4 guarantees simple, rapid and reproducible microinjections into cells.

- Applications**
- > Reproducible and serial microinjection into adherent cells when combined with the InjectMan® 4 micromanipulator
 - > Pronuclear or cytoplasmic injection of RNA/DNA solutions into fertilized oocytes of mammals, when combined with the TransferMan® 4r micromanipulator
 - > Especially well suited for injection volumes from femtoliters to 100 pL

FemtoJet® 4x



Description
The electronic microinjector, FemtoJet 4x, is the ideal solution if your research demands injection volumes greater than 100 pL and/or longer series at higher pressures – increasingly seen in functional genomics and developmental biology applications. The FemtoJet 4x with its external pressure supply (not included) delivers the precise and continuous pressure required. Featuring the same quality design and compatibility as the FemtoJet 4i, the 4x model is the “heavy duty” device for those more demanding applications.

- Applications**
- > Microinjection into small organisms and embryos in the early stages of development (e.g., *Drosophila melanogaster*, Zebrafish, etc.)
 - > Especially well suited for serial injection volumes from 100 pL to 1 µL or more

Typical Injection Volume	FemtoJet 4i --> FemtoJet 4x			
Cell nucleus of adherent cells				
Cytoplasm of adherent cells				
Pronucleus of fertilized mouse oocytes				
Caenorhabditis elegans				
Fish embryos in early development phases				
Xenopus laevis oocytes				
Volume (liter, logarithm, measurement unit)	10 ⁻¹⁵	10 ⁻¹²	10 ⁻⁹	10 ⁻⁶
Unit	femtoliter	picoliter	nanoliter	microliter

FemtoJet 4i is suitable for applications that require lower volume ranges; FemtoJet 4x is better suited for applications that require higher volume ranges. Both feature the same injection time and pressure parameters.



FemtoJet® 4i and FemtoJet® 4x

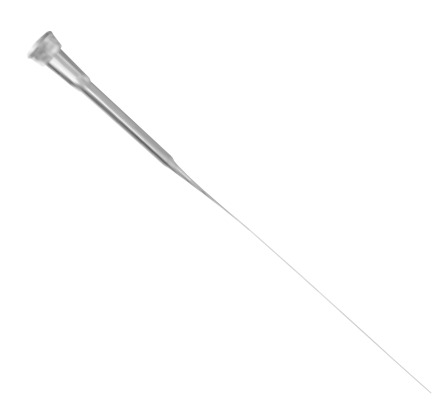


Both the FemtoJet 4i and FemtoJet 4x, form the perfect system with Eppendorf micromanipulators and can be easily combined with all types of micromanipulators

Technical specifications		
Model	FemtoJet 4i	FemtoJet 4x
Dimensions (W x D x H)	8.4 x 8.1 x 9.8 in / 21.3 x 20.7 x 25 cm	8.4 x 8.1 x 9.8 in / 21.3 x 20.7 x 25 cm
Weight w/o accessories	11 lb / 5 kg	7.7 lb / 3.5 kg
Clean function	Max. 6,000 hPa (87 psi)	Max. 6,000 hPa (87 psi)
Compensation pressure	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa
Injection pressure	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa	5 – 6,000 hPa (87 psi); can be set in increments of 1 hPa
Pressure supply	Integrated compressor	External pressure supply (not included)

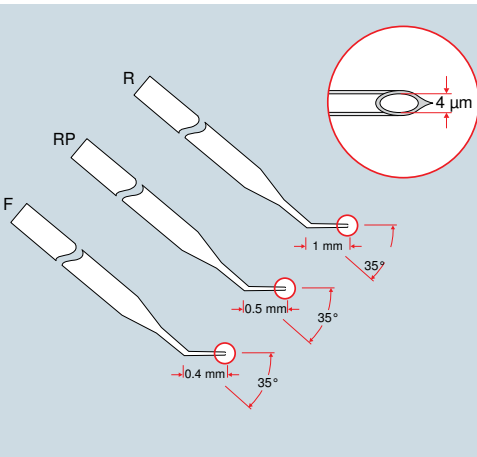
Ordering information		
Description	Catalog No.	List USD
FemtoJet® 4i, programmable microinjector with integrated pressure supply, including foot control	5252000021	\$9,790.00
FemtoJet® 4x, programmable microinjector with external pressure supply (not included), including foot control	5253000025	6,780.00
Hand control, for triggering inject function	5252070011	82.00
O-Ring set, for grip heads 0 to 3 with removal tool	920005870	56.50
Positioning aid, pack of 2, for mounting and re-positioning universal capillary holder on TransferMan® 4r and InjectMan® 4	5192072001	117.00
Service kit, for grip heads and capillary holder, consisting of O-ring set and adapter for Femtotips®	920005888	147.00
Grip head 1, for microcapillaries with 1.2 to 1.3 mm outer diameter, 2 pieces	920007708	157.00
Grip head 2, for microcapillaries with 1.4 to 1.5 mm outer diameter, 2 pieces	920007716	157.00
Grip head 3, for microcapillaries with 0.7 to 0.9 mm outer diameter, 2 pieces	920007724	157.00
Grip head 0, for microcapillaries with 1.0 to 1.1 mm outer diameter, 2 pieces	920007414	157.00
Universal capillary holder, for mounting Femtotips®, Femtotip II or grip heads, incl. grip head 0, adapter for Femtotips® and replacement O-rings	920007392	375.00
Y-cable FJ4, Y-cable for connecting FemtoJet® 4i/4x with a PC and TransferMan® 4r or InjectMan® 4	5192080004	155.00
Y-cable PX, Y-cable for connecting Eppendorf PiezoXpert® or a PC with TransferMan® 4r or InjectMan® 4 and FemtoJet® 4i/4x	5192081000	155.00

Eppendorf Microcapillaries

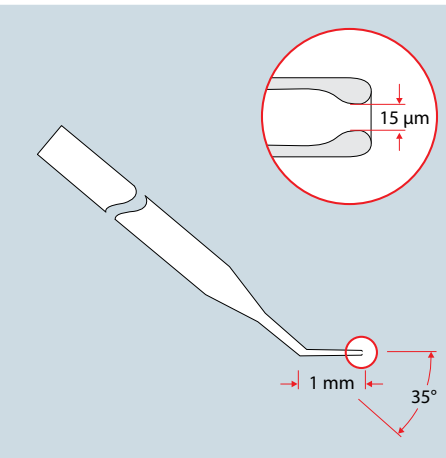


- Applications Eppendorf Microloader™**
- > Filling of microcapillaries for microinjection
 - > Recovery excess solution from the capillary
 - > Pipetting small volumes where additional reach is needed

- Eppendorf Microloader™**
- > Extremely long, fine and flexible tip for filling of microcapillaries for microinjection and when additional reach is needed
 - > Microloader tips and rack are autoclavable
 - > Highest precision and accuracy when used with Eppendorf pipettes for 0.5 to 10 µL (gray control button)



- Applications TransferTip® ICSI**
- > Transfer of sperm to oocytes
- TransferTip® ICSI**
- > 4 µm inner diameter
 - > 35° tip angle
 - > Heat-formed spike eases penetration
 - > Sterilized via validated gamma irradiation
 - > Non-cytotoxic (as identified by the mouse embryo development test)
 - > Capillary safe for optimum protection
 - > Three variants (F, RP, R) with different tip end characteristics



- Applications VacuTip**
- > Capillary for holding suspension cells (e.g., oocytes and blastocysts)
- VacuTip**
- > 15 µm inner diameter
 - > 35° tip angle
 - > Flange length 1 mm
 - > Sterilized via validated gamma irradiation
 - > Non-cytotoxic (as identified by the mouse embryo development test)
 - > Capillary safe for optimum protection





Eppendorf Microcapillaries

Applications VacuTip FCH

- > Capillary for holding suspension cells (e.g., oocytes and blastocysts)

VacuTip FCH

- > 60 µm inner diameter
- > 25° tip angle
- > Flange length 0.5 mm
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as identified by the mouse embryo development test)
- > Capillary safe for optimum protection

Applications IMSI/TESE Tip

- > Intracytoplasmic morphologically selected sperm injection (IMSI)
- > Testicular sperm extraction from biopsy tissue (TESE)

IMSI/TESE Tip

- > 8 µm inner diameter
- > 35° tip angle
- > Rigid flange, 1.9 mm length
- > Rounded, non polished
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as identified by mouse embryo development test)
- > Capillary safe for optimum protection

Applications Polar Body Biopsy Tip MML

- > Laser-assisted polar body biopsy according to Dr. Markus Montag

Polar Body Biopsy Tip MML

- > 19 µm inner diameter
- > 35° tip angle
- > Rigid flange, 1.9 mm length
- > Rounded tip end
- > Sterilized via validated gamma radiation
- > Non-cytotoxic (as identified by the mouse development test)
- > Capillary safe for optimum protection

Applications TransferTip® (ES)

- > Production of transgenic animals via embryonic stem cell transfer

TransferTip® (ES)

- > 15 µm inner diameter
- > 20° tip angle
- > Rigid flange, 1 mm length
- > Heat-formed spike eases penetration
- > Sterilized via validated gamma irradiation
- > Capillary safe for optimum protection

Applications Polar Body Biopsy Tip FCH

- > Laser-assisted polar body biopsy

Polar Body Biopsy Tip FCH

- > 20 µm inner diameter
- > 15° tip angle
- > Rigid 0.5 mm flange
- > Rounded tip end
- > Sterilized via validated gamma irradiation
- > Non-cytotoxic (as identified by the mouse development test)
- > Capillary safe for optimum protection

Applications Piezo Drill Tip Mouse ICSI

- > Transfer of mouse spermatocytes into the cytoplasm of unfertilized mouse oocytes

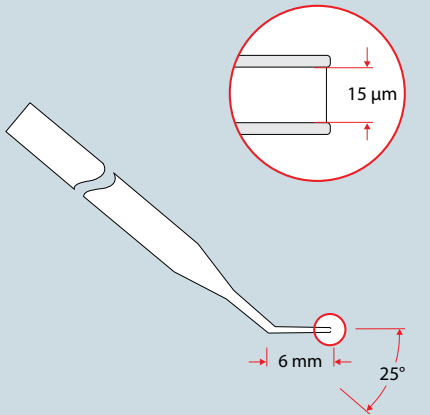
Piezo Drill Tip Mouse ICSI

- > 6 µm inner diameter
- > 25° tip angle
- > Rigid flange, 6 mm length
- > Jagged, non-polished
- > Sterilized via validated gamma irradiation
- > Capillary safe for optimum protection





Eppendorf Microcapillaries



Applications Piezo Drill Tip ES

- > Piezo-assisted transfer of embryonic stem cells into blastocysts

Piezo Drill Tip ES

- > 15 µm inner diameter
- > 25 ° tip angle
- > Rigid flange, 6 mm length
- > Jagged, non-polished
- > Sterilized via validated gamma irradiation
- > Capillary safe for optimum protection

Ordering information		
Description	Catalog No.	List USD
Microloader™ , tip for filling Femtotips and other glass microcapillaries, sterile, 0.5 – 20 µL, 100 mm, light gray, 192 pcs. (2 racks x 96 pcs.)	930001007	\$169.00
VacuTip , holding capillary, 35° tip angle, 15 µm inner diameter, 1 mm flange, sterile, set of 25 ¹⁾	930001015	410.00
VacuTip FCH , holding capillary, 25° tip angle, 60 µm inner diameter, 0.5 mm flange, sterile, set of 25 ¹⁾	5175240006	420.00
TransferTip® RP (ICSI) , for sperm injection using the ICSI technique, 35° tip angle, 4 µm inner diameter, 0.5 mm flange, sterile, set of 25 ¹⁾	930001074	525.00
TransferTip® F (ICSI) , for sperm injection using the ICSI technique, sterile, set of 25 ¹⁾	930001031	535.00
TransferTip® R (ICSI) , for sperm injection using the ICSI technique, 35° tip angle, 4 µm inner diameter, 1 mm flange, sterile, set of 25 ¹⁾	930001066	535.00
Polar Body Biopsy Tip MML , transfer capillary for laser-assisted polar body biopsy, 35° tip angle, 19 µm inner diameter, 1.9 mm flange, sterile, set of 25 ¹⁾	5175210000	535.00
Polar Body Biopsy Tip FCH , transfer capillary for laser-assisted polar body biopsy, 15° tip angle, 20 µm inner diameter, 0.5 mm flange, sterile, set of 25 ¹⁾	5175230000	535.00
IMSI/TESE Tip , for selection and transfer of sperm or other cells, 35° tip angle, 8 µm inner diameter, 1.9 mm flange, sterile, set of 25 ¹⁾	5175117000	535.00
TransferTip® (ES) , for ES cell transfer, 20° tip angle, 15 µm inner diameter, 1 mm flange, sterile, set of 25	930001040	535.00
Piezo Drill Tip Mouse ICSI , for piezo-assisted mouse ICSI, 25° tip angle, 6 µm inner diameter, 6 mm flange, sterile, set of 25	930001091	515.00
Piezo Drill Tip ES , for piezo-assisted mouse ES cell transfer, 25° tip angle, 15 µm inner diameter, 6 mm flange, sterile, set of 25	930001104	515.00

¹⁾ This product is registered in the European Union as medical device (according to Medical Device Directive 93/42/EEC).

i For more information go to www.eppendorf.com



Training in Micromanipulation



Eppendorf is your expert partner for all questions regarding cell handling. Our training provides an introduction to the most relevant areas of micromanipulation.



Course participants will obtain detailed knowledge on the technical aspects of microinjection and micromanipulation methods. Examples of usage in current research will be discussed in the lectures. At the end of the seminar, participants will be able to prepare and carry out microinjections into cells and to conduct basic micromanipulation procedures on cells.

Target group
This training is designed for scientists and technicians in all biomedical research areas, although basic experience working with tissue culture cells and light microscopes will be helpful.

In cooperation with the renowned European Molecular Biology Laboratory (EMBL) in Heidelberg, additional courses are offered at the new Advanced Training Centre (ATC). Information about course contents are available at www.eppendorf.com/training

Microinjection into adherent cells:

- > Sample preparation for microinjection
- > Semi-automated microinjection into adherent cells of fluorescent dyes and GFP-constructs
- > Detection of GFP-tagged proteins via fluorescence microscopy

Microinjection techniques for the production of transgenic mice:

- > Injection of nucleic acids into the pronucleus of fertilized mouse oocytes
- > Transfer of embryonic stem cells into blastocysts and morulae
- > Piezo-assisted cell transfer into 8-cell stage embryos

i For more information go to www.eppendorf.com



Cell Manipulation Performance Plans



Advanced Maintenance
A one-time service event to ensure the instrument operates at peak performance over the instrument’s lifetime. This includes cleaning of the surface and internal assemblies, stability testing and system testing. Where applicable the following services are also included: checking leak tightness, software data analysis and upgrade, motor module testing and exchange of oil.

Advanced Maintenance	Catalog No.	List USD
Electroporator/ Multiporator	0082010004	\$312.00
Microinjector/ Micromanipulator	0082010014	697.00

Premium Service
This comprehensive service includes cleaning of the surface and internal assemblies, stability testing and system testing. Where applicable the following services are also included: checking leak tightness, software data analysis and upgrade, motor module testing and exchange of oil. Quality-tested Eppendorf original spare parts will be exchanged when necessary. Premium service includes the cost of parts, labor, loaner instrument and case, and shipping or service travel for any repair on the instrument.

Premium Service	Catalog No.	List USD
Electroporator/ Multiporator	0082010005	\$ 750.00
Microinjector/ Micromanipulator	0082010014	2,563.00

Extended Warranty
Your new Cell Manipulation instrument(s) comes with a 2 year warranty which covers all parts and labor should the system need repair. After the warranty period is over you may also purchase additional years of warranty coverage. Most systems are returned to our Service Center for repair, in some cases Field Service is available with a travel zone charge.

Extended Warranty	Catalog No.	List USD
Electroporator/ Multiporator	901510656	\$ 457.00
Micromanipulator (TransferMan 4m/r, NK2, NP2)	901510739	2,336.00
Micromanipulator (InjectMan 4, NI2)	901510741	2,117.00
Microinjector	901513335	992.00



Certification Services
Installation Qualification (IQ), Operational Qualification (OQ) and Installation and Operational Qualification (IQ/OQ) are available for all instruments.
IQ—includes installation for optimal performance and reliability. This includes checking the unpacked instrument and condition of delivery packaging, instrument set-up and initial operation.
OQ—includes visual inspection of display and system testing. Where applicable the following services are also included: checking leak tightness, analyzing error statistics, motor module testing and exchange of oil. The OQ provides all necessary documentation to meet the regulated laboratory needs for compliance requirements.
IQ/OQ—assures that your Eppendorf instrumentation is delivered, installed and operating according to manufacturer specifications. This service also includes cleaning of internal assemblies and electrical testing where applicable.

Certification Services	Catalog No.	List USD
IQ		
Electroporator/ Multiporator	0082010007	\$ 900.00
Microinjector/ Micromanipulator	0082010017	900.00
OQ		
Electroporator/ Multiporator	0082010008	257.00
Microinjector/ Micromanipulator	0082010018	1,200.00
IQ/OQ		
Electroporator/ Multiporator	0082010009	1,000.00
Microinjector/ Micromanipulator	0082010019	1,405.00

Essential Check
An essential check of your instrument allows for reliable system operating at peak performance over the instruments lifetime. This includes cleaning of external parts, stability testing and system testing. Where applicable the following services are also included: checking leak tightness, analyzing error statistics, motor module testing and exchange of oil.

Essential Check	Catalog No.	List USD
Electroporator/ Multiporator	0082010003	\$154.00
Microinjector/ Micromanipulator	0082010013	390.00



Eppendorf Cell Culture Consumables



- 1. Eppendorf Cell Culture Plates
- 2. Eppendorf Cell Culture Flasks
- 3. Eppendorf Cell Culture Dishes

Description
Experience a new dimension in cell culture with Eppendorf Cell Culture Consumables. These products meet your needs for excellent cell performance and reliability as well as for advanced protection against contamination. Innovative technologies for surface activation deliver a tissue-culture-treated (TC treated) surface with outstanding homogeneity. The planarity and transparency of all surfaces contribute to an optical performance that not only facilitates your routine analysis, but also saves time during automated read-out. In all formats, we focused on advanced handling, secure stacking, and easy identification, readability and tracking.

The new packaging concept provides complete protection during transportation, tool-free opening, easy resealing for safe and clean storage, and fast identification of the desired product. The boxes and bags are very compact for space saving storage. Learn more about the truly comprehensive solutions for cell culture on the following pages.

- Applications**
- > Expansion and culture of adherent and suspension cells on TC treated or on non-treated polystyrene
 - > Performance of cell-based assays and microscopic analysis



All Cell Culture Consumables

Surface	Tissue culture treated or non-treated
Operating temperature	-86 °C to 60 °C
Storage before use	Store dry and at RT. Protect from sunlight and UV rays
Purity	All products are sterile. Sterility is assured by irradiation according to DIN EN ISO 11137-2:2007 with sterility assurance level (SAL) of 10 ⁻⁶ . Sterility is tested according to USP, Ph. Eur. 2.6.1. All products are free of detectable pyrogens, RNase, DNase and DNA. All products are non-cytotoxic.
Certificates	Leachables, heavy metals, production conditions, cytotoxicity. The certificates can be downloaded at www.eppendorf.com
Lot-specific certificates	Sterility Absence of: Pyrogens, RNase, DNase, DNA. TC treated surface: Testing for cell attachment and cell growth with an anchorage-dependent cell line Lot-specific certificates can be downloaded at www.eppendorf.com

Plates	6-Well	12-Well	24-Well	48-Well	96-Well
Theoretical total volume	16.0 mL	6.8 mL	3.6 mL	1.5 mL	0.4 mL
Work volume	3 – 5 mL	1 – 2 mL	0.5 – 1 mL	0.3 – 0.5 mL	0.1 – 0.2 mL
Growth area/well ¹⁾	940.3 mm ²	391.1 mm ²	208.9 mm ²	85.6 mm ²	37.0 mm ²
Well diameter	34.6 mm	22.4 mm	16.2 mm	10.4 mm	6.8 mm
L x W x H	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 20.0 mm	127.8 x 85.5 x 14.4 mm
Height with lid	23.2 mm	23.2 mm	23.2 mm	23.2 mm	17.6
Dimensions	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I	Conforms to ANSI/SBS I to V
Centrifugation	Can be centrifuged up to 2500 x g. When stacked (up to 5 for 96-Well plates and up to 4 for all other formats) can be centrifuged up to 300 x g.				

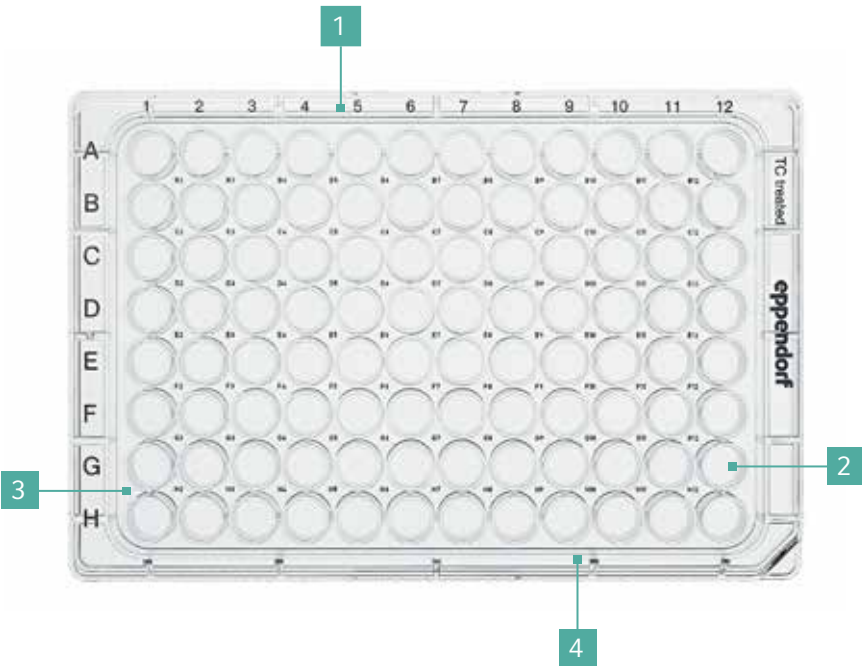
¹⁾ For the initial seeding of cells, take into account the growth area in order to support optimal cell growth.

Flasks	T-25	T-75	T-175
Theoretical total volume	83.6 mL	279.8 mL	662.1 mL
Work volume	3.0 – 7.0 mL	8.0 – 20.0 mL	20.0 – 30.0 mL
Growth area	26.9 cm ²	77.9 cm ²	179.5 cm ²
L x W x H	99.0 x 56.0 x 37.0 mm	163.0 x 82.0 x 46.6 mm	230.0 x 122.0 x 48.0 mm
Centrifugation	Can be centrifuged with the suitable adapters; refer to the manufacturer's instruction.		

Dishes	35 mm	60 mm	100 mm
Theoretical total volume	8.1 mL	26.6 mL	99.2 mL
Work volume	2.0 – 3.0 mL	3.0 – 5.0 mL	8.0 – 10.0 mL
Growth area	9.5 cm ²	21.9 cm ²	56.8 cm ²
Diameter x height	36.7 x 10.8 mm	59.7 x 14.0 mm	93.8 x 19.4 mm
Height with lid	12.5 mm	15.7 mm	21.3 mm
Centrifugation	Cannot be centrifuged.		



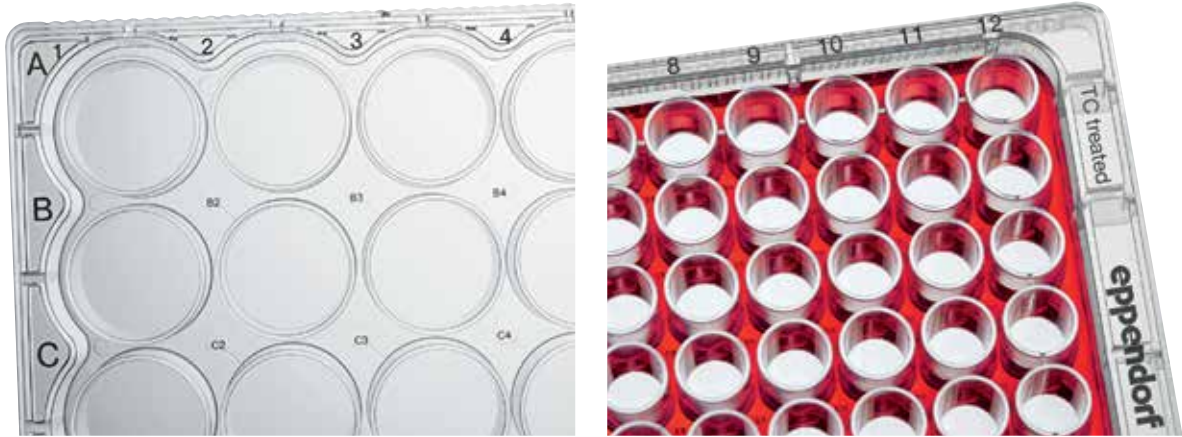
Eppendorf Cell Culture Plates



- 1. OptiTrack® contrast rich alphanumeric labeling for fast and easy well identification
- 2. Optimized microscopical performance due to enhanced planarity, reduction of meniscus and clarity of the material
- 3. New chimney-well design minimizes the “edge effect” in assays
- 4. Facilitated handling due to pronounced corrugation of the plate

Description
Eppendorf Cell Culture Plates are tailored for the expansion of smaller cell numbers as well as for cell-based assays. Qualification of cell morphology and cell performance can be especially critical in those steps. We optimized the optical performance by enhancement of the planarity, material clarity, and reduction of the liquid meniscus to facilitate both manual and automated read-out. Contrast rich alphanumeric OptiTrack® labeling allows for easy orientation and fast identification of individual wells. The new chimney-well design avoids inhomogeneous growth of cells in the outer ring of wells which reduces costs and increases efficiency. If cells need to spend more time outside of the incubator, filling the inter-well spaces of the plate will keep the temperature stable and prevent unwanted temperature shifts. The lid and plate bottom can easily be differentiated providing extra safety in transportation and stacking.

- Product features**
- > Easy and fast well identification by contrast rich individual well ID and OptiTrack® alphanumeric labeling
 - > Moat surrounding the outer wells to prevent the “edge effect” when filled with liquid
 - > Chimney-well design enables filling of the inter-well spaces of the plate to level out well-to-well temperature shifts outside the incubator
 - > Robust stacking performance by pronounced rims on plate lid and excellent fitting of lid and base when used in stacks
 - > Lid taps under the plate for minimized surface contact and therefore reduced risk of contamination
 - > Easy differentiation of lid and plate bottom due to a pronounced corrugation and wider sized base
 - > Pronounced ventilation gaps for an optimized gas and temperature transfer when incubating in stacks
 - > Optimized microscopical performance due to enhanced planarity, reduction of meniscus and clarity of the material



The contrast rich OptiTrack® matrix and individual well ID facilitate tracking and well identification in Eppendorf Cell Culture Plates

The filling of the surrounding moat prevents edge effects and yields up to 38% more usable wells

Ordering information		
Description	Catalog No.	List USD
Eppendorf Cell Culture Plate, 6-well , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030720113	\$168.00
Non-treated, 60 plates, individually wrapped	0030720016	154.00
TC treated, 100 plates (10 bags x 10 plates)	0030720130	255.00
TC treated, 200 plates (20 bags x 10 plates)	0030720121	510.00
Eppendorf Cell Culture Plate, 12-well , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030721110	198.00
Non-treated, 60 plates, individually wrapped	0030721012	177.00
Eppendorf Cell Culture Plate, 24-well , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030722116	215.00
Non-treated, 60 plates, individually wrapped	0030722019	194.00
Eppendorf Cell Culture Plate, 48-well , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 60 plates, individually wrapped	0030723112	254.00
Non-treated, 60 plates, individually wrapped	0030723015	229.00
Eppendorf Cell Culture Plate, 96-well , with lid, flat bottom, sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 80 plates, individually wrapped	0030730119	395.00
Non-treated, 80 plates, individually wrapped	0030730011	358.00
TC treated, 100 plates (10 bags x 10 plates)	0030730135	445.00
TC treated, 200 plates (20 bags x 10 plates)	0030730127	890.00

i For more information go to www.eppendorf.com





Eppendorf Cell Culture Dishes



- 1. Corrugated handling ring for safe gripping and transportation
- 2. Pronounced rim on lid for robust and safe stacking
- 3. Direct surface identification on the product
- 4. SplashProtect™ ring inside the lid and reliable differentiation between lid and base
- 5. Innovative resealable and shrinkable product packaging for secure and space-saving storage

Description
Whenever you need direct access to your cells, dishes are the format of choice. Eppendorf cell culture dishes were designed with a focus on improved handling and stacking performance to ensure a new level of safe and carefree usage. It all starts with the packaging: the innovative design can be easily opened without tools and resealed without tape. The bags are shrinkable for space-saving, safe, and contamination-free storage of unused dishes. With the Eppendorf dishes, a corrugated handling ring provides unsurpassed safety in handling during transportation and expansion of cells. A SplashProtect™ ring inside the dish lid prevents spillage and traps fluid if condensation occurs. Combined with the outstanding, sturdy stacking, our cell culture dishes are unparalleled in their ease of transport and handling, safety, and convenience.

- Product features**
- > Unsurpassed safety in handling during transportation and while working due to corrugated handling ring
 - > SplashProtect ring inside of the dish lid traps liquid and prevents spills during transportation or incubation
 - > Pronounced rim on dish lid and exact fitting of lid and bottom ensure sturdy, secure stacking
 - > Easy differentiation of lid and dish bottom prevents unintended removal of the lid
 - > Packaging combines tool-free opening, resealable top and side for tape-free closing, and an easy solution to shrink the package for space-conscious storage



The corrugated handling ring provides extra safe handling and transport of cells

SplashProtect™ ring inside the lid acts as a liquid trap, preventing spills and potential contamination due to condensed liquid

Ordering information		
Description	Catalog No.	List USD
Eppendorf Cell Culture Dishes, 35 mm , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 300 dishes (30 bags x 10 dishes)	0030700112	\$216.00
Non-treated, 300 dishes (30 bags x 10 dishes)	0030700015	195.00
Eppendorf Cell Culture Dishes, 60 mm , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 300 dishes (30 bags x 10 dishes)	0030701119	216.00
Non-treated, 300 dishes (30 bags x 10 dishes)	0030701011	195.00
Eppendorf Cell Culture Dishes, 100 mm , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, 300 dishes (30 bags x 10 dishes)	0030702115	465.00
Non-treated, 300 dishes (30 bags x 10 dishes)	0030702018	420.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com





Eppendorf Cell Culture Flasks



- 1. Anti-Rolling Cap with corrugation for improved handling
- 2. ConvexAccess™ neck for facilitated access to entire growth area
- 3. In-line pressure test for each flask for reliable workflow safety
- 4. High efficiency air filter technology for improved protection against contamination
- 5. Direct surface identification on flask and cap



ConvexAccess geometry facilitates the access to the growth area and prevents unintended manipulation of the cell monolayer. This design creates a more ergonomic work position and makes cell seeding and media exchange easier and safer.

Safety in handling, protection against contamination, and excellent gas transfer are merged in the design of Eppendorf filter and plug-seal caps

Description

Flasks are the preferred vessel for long term cultivation or large-scale expansion of cells, providing the best protection against contamination. Unsurpassed protection of your cells from contaminants was one of the key requirements in developing the Eppendorf Cell Culture Flasks. A new, high efficiency air filter technology combines excellent protection with reliable gas exchange. In-line pressure testing for each flask guarantees leakage-free flasks for maximum workflow safety. The unique ConvexAccess™ shape of the neck facilitates the access to the growth area and makes cell seeding and media exchange much more convenient, safe, and reliable.

Product features

- > ConvexAccess™ geometry for facilitated access to growth area and easier and safe cell treatment
- > Optimized gas exchange and protection against contamination through high efficiency air filter technology
- > Defined arrested position on plug-seal caps to prevent undesired closing
- > Anti-rolling cap with corrugation facilitates cultivation steps when the cap needs to be set aside
- > 100% in-line control for leakage-free flasks and maximum safety
- > Direct surface identification on flask and cap

Ordering information

Description	Catalog No.	List USD
Eppendorf Cell Culture Flasks T-25 , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, with filter cap, 192 flasks (24 bags x 8 flasks)	0030710126	\$395.00
TC treated, with plug-seal cap, 192 flasks (24 bags x 8 flasks)	0030710118	343.00
Non-treated, with filter cap, 192 flasks (24 bags x 8 flasks)	0030710029	354.00
Non-treated, with plug-seal cap, 192 flasks (24 bags x 8 flasks)	0030710010	306.00
Eppendorf Cell Culture Flasks T-75 , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, with filter cap, 80 flasks (16 bags x 5 flasks)	0030711122	296.00
TC treated, with plug-seal cap, 80 flasks (16 bags x 5 flasks)	0030711114	268.00
Non-treated, with filter cap, 80 flasks (16 bags x 5 flasks)	0030711025	269.00
Non-treated, with plug-seal cap, 80 flasks (16 bags x 5 flasks)	0030711017	241.00
Eppendorf Cell Culture Flasks T-175 , sterile, free of detectable pyrogens, RNase & DNase, DNA. Non-cytotoxic.		
TC treated, with filter cap, 48 flasks (12 bags x 4 flasks)	0030712129	312.00
TC treated, with plug-seal cap, 48 flasks (12 bags x 4 flasks)	0030712110	323.00
Non-treated, with filter cap, 48 flasks (12 bags x 4 flasks)	0030712021	280.00
Non-treated, with plug-seal cap, 48 flasks (12 bags x 4 flasks)	0030712013	287.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Eppendorf Cell Imaging Consumables



- 1. Eppendorf Cell Imaging Slides
- 2. Eppendorf Cell Imaging Coverglasses
- 3. Eppendorf Cell Imaging Dishes
- 4. Eppendorf Cell Imaging Plates glass bottom
- 5. Eppendorf Cell Imaging Plates film bottom

Description
Eppendorf Cell Imaging Consumables allow sophisticated imaging and microscopy applications on an expert level. The products combine premium performance with innovative solutions for demanding optical analysis and fluorescent stainings, whether you perform inverse microscopy, live cell imaging or fluorescence-based analysis.

- Product features**
- > Unsurpassed performance of glass and film surfaces for adherent cells due to innovative tissue culture treatment
 - > Low intrinsic fluorescence and high light transmission for enhanced signal-to-noise ratio
 - > Easy access to the complete imaging area with immersion lenses for alleviated handling and advanced compatibility with microscopes
 - > Ergonomic and robust design
 - > Precise planarity supports high resolution microscopes and autofocus systems



- Eppendorf Cell Imaging Dishes**
- > TC treated cover glass bottom
 - > Available thickness: 145 µm and 170 µm
 - > 18 mm central cavity for defined cell growth and staining
 - > Low height allows easy access for micromanipulation / microinjection
 - > Excellent planarity

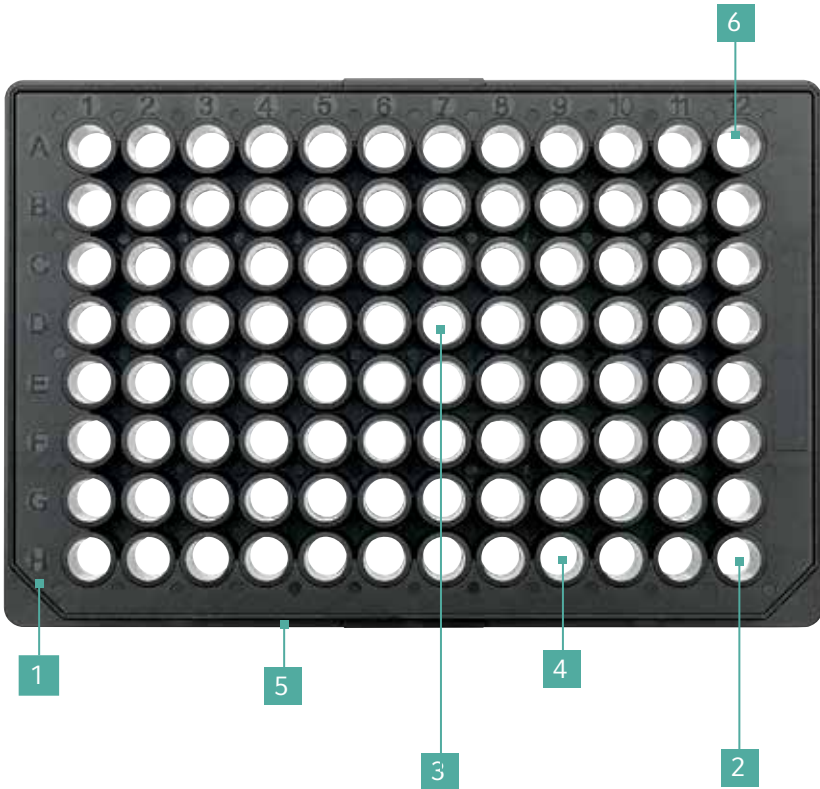
- Eppendorf Cell Imaging Slides and Coverglasses**
- > Slides with 1 mm thickness or 170 µm cover glass bottom
 - > Improved cell adhesion due to innovative TC treated glass surface
 - > High chemical resistance for reliable fixation even with acetone
 - > Easy and tool-free removal of chambers



- Eppendorf Cell Imaging Plates**
- > Glass bottom with excellent planarity for reliable results
 - > Ultrathin film bottom allows for high gas permeability and UV-light transparency, ideal for phototoxicity and hypoxia studies
 - > Excellent signal-to-noise ratio
 - > Individually wrapped for reliable purity



Eppendorf Cell Imaging Plates



- 1. 24-well and 96-well formats with glass or film bottom for a variety of applications
- 2. Ultrathin film bottom is ideal for phototoxicity and hypoxia studies due to its high gas permeability and UV light transparency
- 3. Glass bottom with excellent planarity for reliable results
- 4. TC treated surface for improved cell adhesion
- 5. Low skirt for easier microscopic access to outer wells
- 6. Individually wrapped for reliable purity

Description
Eppendorf Cell Imaging Plates are black 24- or 96-well plates with a clear bottom made of either a thin 25 µm film or a 170 µm cover glass. The plates with film bottom have excellent light transmission rates even for UV-A and UV-B light. The autofluorescence of the material is lower than a conventional polystyrene bottom with a significant reduction in background signaling. Furthermore, the film bottom enables high gas transfer: oxygen supply and equilibration with the atmosphere are achieved directly through the plate bottom. The glass bottom plates offer excellent planarity for sophisticated microscopic analysis.

- Product features**
- > TC treated surfaces for efficient growth of adherent cells
 - > All plate types have a low skirt design perfectly suited to access all wells with immersion objectives
 - > An excellent signal-to-noise ratio can be expected regardless of the plate bottom type
 - > Excellent planarity of all plates ensures unsurpassed manual handling and reliable results in automated devices
 - > Individually wrapped for reliable purity
 - > The ultrathin film bottom allows for high gas permeability and UV-light transparency, ideal for phototoxicity and hypoxic studies



TC treated coverglass with 170 µm thickness for best optical results



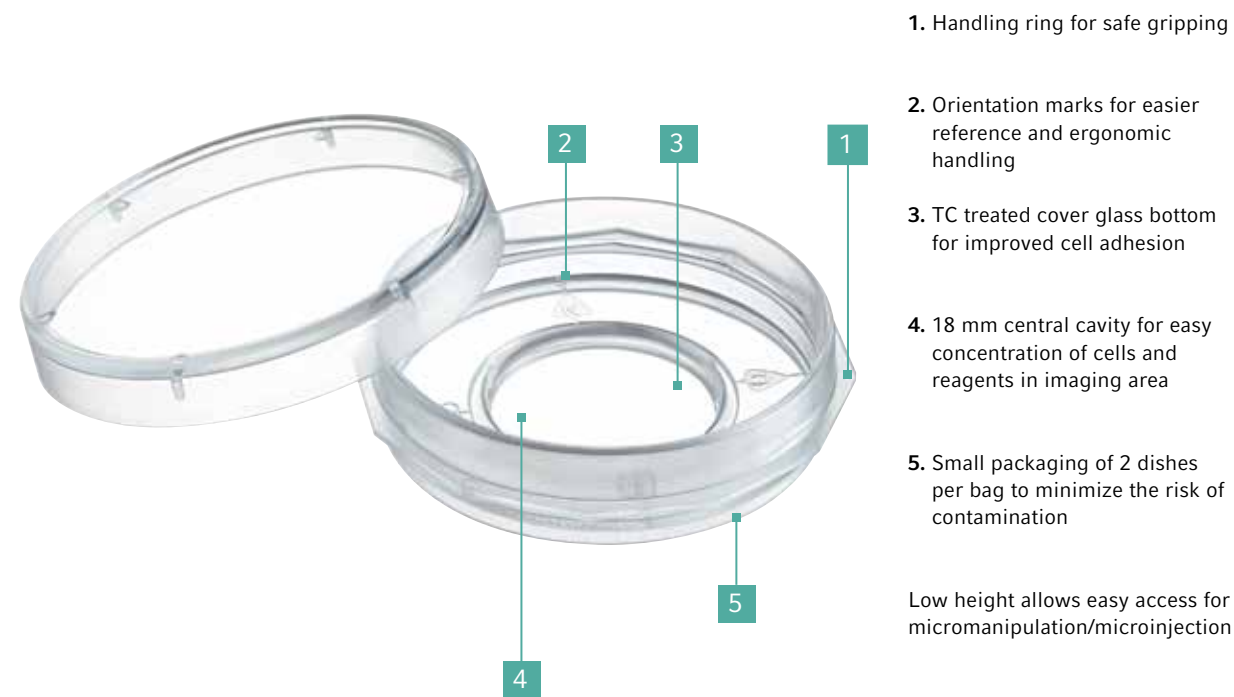
Ultrathin TC treated film bottom with low autofluorescence and high gas permeability

Ordering information		
Description	Catalog No.	List USD
Eppendorf Cell Imaging Plates, with lid, black with clear F-bottom. TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
24-Well Cell Imaging Plate with 170 µm coverglass bottom, individually wrapped, 20 pcs.	0030741021	\$574.00
96-Well Cell Imaging Plate with 170 µm coverglass bottom, individually wrapped, 20 pcs.	0030741030	631.00
24-Well Cell Imaging Plate with 25 µm film bottom, individually wrapped, 20 pcs.	0030741005	246.00
96-Well Cell Imaging Plate with 25 µm film bottom, individually wrapped, 20 pcs.	0030741013	306.00





Eppendorf Cell Imaging Dishes



Description
Eppendorf Cell Imaging Dishes ensure excellent results in high resolution microscopy of living and fixed cells. The bottom of the 35 mm dishes is made from coverglass. The central 18 mm cavity is lower than the level of the surrounding polystyrene dish, which enables concentration of the cells during seeding on the glass surface and helps to reduce costs of antibodies and dyes. Plate handling and reference are easy, safe, and convenient due to a polygonal gripping zone and directional orientation marking.

- Product features**
- > TC treated coverglass surface for reliable results when working with adherent cells
 - > Easy access to the complete imaging area with immersion lenses for alleviated handling and advanced compatibility with microscopes
 - > An 18 mm central cavity for defined growth and staining of cells for reduced costs of antibodies and dyes
 - > Polygonal gripping zone for improved handling
 - > Macroscopic orientation marks facilitate easy orientation
 - > Low rim side walls allow for easy access for microinjection
 - > Extraordinary planarity supports enhanced optical performance even during temperature shifts

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Ordering information		
Description	Catalog No.	List USD
Eppendorf Cell Imaging Dishes, with coverglass bottom, TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
35 x 10 mm Cell Imaging Dish 145 µm (1), 2 dishes per bag, 30 pcs.	0030740009	\$184.50
35 x 10 mm Cell Imaging Dish 170 µm (1.5), 2 dishes per bag, 30 pcs.	0030740017	184.50



Cell Imaging Slides and Coverglasses



- 1. Improved cell adhesion due to innovative TC treated glass surface
- 2. Chamber and lid made of cyclic olefin copolymer (COC) for low intrinsic fluorescence
- 3. High temperature and chemical stability for reliable fixation, even with acetone
- 4. Four variants for format flexibility
- 5. Large frosted labeling area allows easy labeling and identification of samples
- 6. Easy and tool-free removal of chambers



Tool-free chamber removal with minimal glue residue for accurate coverslipping



TC treated glass surface for reliable growth of most adherent cell types

Description
Eppendorf Cell Imaging Slides and Coverglasses are made of materials of high chemical resistance for reliable and reproducible results in fixation protocols. Tool-free and easy removal of chambers from Cell Imaging Slides and Coverglasses makes working easy, convenient and reliable. Products are available with one to eight chambers to suit a variety of applications.

- Product features**
- > Choose between a microscopic slide with 1 mm thickness or a 170 µm coverglass, both providing excellent signal-to-noise ratios in fluorescent staining protocols
 - > Facilitated growth of most adherent cell types due to innovative TC treated glass surface
 - > Chambers and lids show high chemical resistance, so fixation even with acetone is possible without problems
 - > Benefit from easy and tool-free removal of the chambers with minimized glue residues
 - > Precise planarity supports high resolution microscopes and autofocus systems

Ordering information		
Description	Catalog No.	List USD
Eppendorf Cell Imaging Slides , TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
Cell Imaging Slide with 1 chamber, individually wrapped, 16 pcs.	0030742044	\$161.00
Cell Imaging Slide with 2 chambers, individually wrapped, 16 pcs.	0030742052	172.50
Cell Imaging Slide with 4 chambers, individually wrapped, 16 pcs.	0030742060	183.50
Cell Imaging Slide with 8 chambers, individually wrapped, 16 pcs.	0030742079	195.00
Eppendorf Cell Imaging Coverglasses , TC treated, sterile, free of detectable pyrogens, RNase and DNase, DNA. Non-cytotoxic.		
Cell Imaging Coverglass with 1 chamber, individually wrapped, 16 pcs.	0030742001	207.00
Cell Imaging Coverglass with 2 chambers, individually wrapped, 16 pcs.	0030742010	218.00
Cell Imaging Coverglass with 4 chambers, individually wrapped, 16 pcs.	0030742028	230.00
Cell Imaging Coverglass with 8 chambers, individually wrapped, 16 pcs.	0030742036	241.00





Model	New Brunswick™ Galaxy® 48 R	New Brunswick™ Galaxy® 170 S
Page	398	406
Capacity	48 L	170 L
Dimensions (W x D x H)	19 x 18.7 x 25.4 in / 48.3 x 47.5 x 64.5 cm	27.8 x 28 x 33.2 in / 70.8 x 71.1 x 84.5 cm
Dimensions internal (W x D x H)	15.8 x 12 x 15.8 in / 40.1 x 30.5 x 40.1 cm	21 x 17.5 x 27.2 in / 53.3 x 44.4 x 69.1 cm
Weight w/o accessories	70 lb / 31.8 kg	198 lb / 89.9 kg
Communication interface	RS-232	RS-232
Display	LCD	LED
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B, U, F, S (x2)	B, U, F, S (x2)
Temperature range	Ambient +4 °C to 50 °C	Ambient +4 °C to 50 °C
Temperature control	± 0.1 °C	± 0.1 °C
Temperature stability at 37 °C	± 0.1 °C	± 0.1 °C
Temperature uniformity	± 0.3 °C	± 0.3 °C
CO ₂ range	0.2 – 20 %	0.2 – 20 %
CO ₂ control	± 0.1 %	± 0.1 %
CO ₂ stability at 5 % CO ₂	± 0.2 %	± 0.2 %
CO ₂ uniformity	± 0.1 %	± 0.1 %
0.1 – 19 % O ₂ control	optional	–
1 – 19 % O ₂ control	optional	–
Access port, 25 mm	standard	standard
BioCommand® software	optional	optional
BMS relay	standard	standard
Copper chamber	–	–
High Temperature Disinfection (4 hours at 120 °C)	optional	optional
Humidity alert and monitoring package	optional	–
Number of shelves	3 (6 optional)	4 (8 optional)
Number of shelving racks	3 (6 optional)	4 (8 optional)
On-board data logging	standard	–
Perforated shelves	standard	standard
Sealed inner glass doors	–	standard
2 split inner doors	optional	–
4 split inner doors	–	optional
8 split inner doors	–	optional

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



New Brunswick™ Galaxy® 170 R	New Brunswick™ S41i
402	412
170 L	170 L
27.8 x 28 x 33.2 in / 70.8 x 71.1 x 84.5 cm	32.8 x 28.7 x 33.4 in / 83.4 x 73 x 84.8 cm
21 x 17.5 x 27.2 in / 53.3 x 44.4 x 69.1 cm	27.2 x 17.5 x 21 in / 69.1 x 44.4 x 53.3 cm
198 lb / 89.9 kg	335 lb / 152 kg
RS-232	Ethernet
LCD	Touchscreen
B, U, F, S (x2)	U, F, S (x2)
Ambient +4 °C to 50 °C	Ambient +5 °C to 50 °C
± 0.1 °C	± 0.1 °C
± 0.1 °C	± 0.1 °C
± 0.3 °C	±0.25 °C at 37 °C
0.2 – 20 %	0.2 – 20 %
± 0.1 %	± 0.1 %
± 0.2 %	± 0.2 %
± 0.1 %	± 0.1 %
optional	–
optional	–
standard	standard
optional	standard
standard	standard
optional	–
optional	standard
optional	–
4 (8 optional)	1 (2nd optional)
8	2
standard	standard
standard	standard
standard	standard
–	–
optional	–
optional	–

New Brunswick™ Galaxy® 48 R



- 1. Integrated, heated, viewing window in outer door
 - 2. On-screen data logging and event monitoring
 - 3. Small footprint on benchtop
 - 4. Optional High Temperature Disinfection
 - 5. Seamless chamber to eliminate possible source of contamination
- Stackable for more capacity with same footprint



One piece seamless chamber minimizes contamination risk and simplifies cleaning



Integrated, heated, viewing window in outer door allows observation without disturbing cultures

Description
Galaxy® 48 R CO₂ Incubator is a mid-sized, 48 liter incubator designed to optimize performance in applications requiring greater isolation and in small labs! The 48 R series of incubators feature a large backlit display with on-screen help menu that allows for easy control & data logging of temperature, humidity, CO₂, door openings, alarms, and optional O₂ control.

- Product features**
- > 48 Liter (1.7 ft³) provides mid-sized capacity within a small footprint
 - > Options: High Temperature Disinfection (4 hour at 120 °C), O₂ control (e.g. for hypoxic studies), 2-split inner glass door; and more (see ordering information)
 - > Fanless design offers more usable space and eliminates the fan as a common, and often recurring source of contamination
 - > Six-sided direct heating system provides a uniform incubated environment to gently bathe cells
 - > Deep-drawn, easy-to-clean stainless steel chamber eliminates seams or welds, removing potential sources of contamination
 - > Low gas consumption saves money



New Brunswick™ Galaxy® 48 R

Technical specifications	
Model	New Brunswick™ Galaxy® 48 R
Capacity	48 L
Dimensions (W x D x H)	19 x 18.7 x 25.4 in / 48.3 x 47.5 x 64.5 cm
Dimensions internal (W x D x H)	15.8 x 12 x 15.8 in / 40.1 x 30.5 x 40.1 cm
Weight w/o accessories	70 lb / 31.8 kg
Communication interface	RS-232
Display	LCD
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B, U, F, S (x2)
Temperature range	Ambient +4 °C to 50 °C
Temperature control	± 0.1 °C
Temperature stability at 37 °C	± 0.1 °C
Temperature uniformity	± 0.3 °C
CO ₂ range	0.2 – 20 %
CO ₂ control	± 0.1 %
CO ₂ stability at 5 % CO ₂	± 0.2 %
CO ₂ uniformity	± 0.1 %
0.1 – 19 % O ₂ control	optional
1 – 19 % O ₂ control	optional
Access port, 25 mm	standard
BioCommand® software	optional
BMS relay	standard
Display readout	Temperature and CO ₂ level, 72-hour data/chart logger, alarm settings
High Temperature Disinfection (4 hours at 120 °C)	optional
Humidity alert and monitoring package	optional
Number of shelves	3 (6 optional)
Number of shelving racks	3 (6 optional)
On-board data logging	standard
Perforated shelves	standard

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Galaxy® 48 R, 48 L, Stock		
120 V/60 Hz, Standard	C048200005	\$ 6,311.00
120 V/60 Hz, 1-19 % O ₂ Control	C048220005	7,613.00
120 V/60 Hz, High-Temp Disinfection	C048210005	6,783.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control	C048230005	7,960.00
New Brunswick™ Galaxy® 48 R, 48 L, Built to Order		
120 V/60 Hz, 2-Split Inner Door	C048212005	8,337.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control	C048210045	8,715.00
120 V/50/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, Humidity Package	C048210065	10,217.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, 2-Split Inner Door	C048212045	9,576.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, 2-Split Inner Door, Humidity Package	C048212065	10,941.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 2-Split Inner Door	C048232005	8,831.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 2-Split Inner Door, Humidity Package	C048232015	10,332.00

i For more information go to www.eppendorf.com



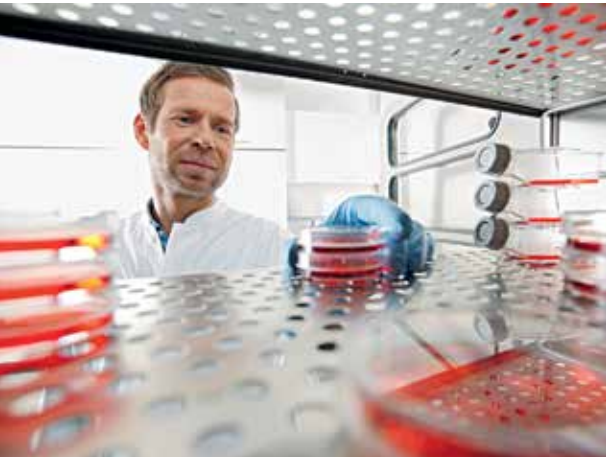


New Brunswick™ Galaxy® 170 R

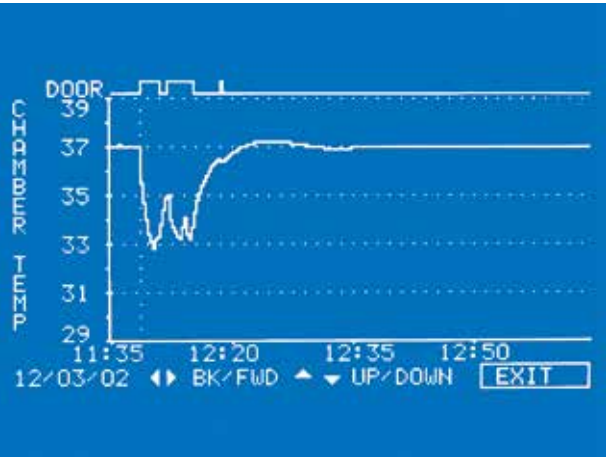


- 1. Deep-drawn seamless chamber without fan to eliminate possible source of contamination
- 2. Removable shelves to minimize risk of cross contamination
- 3. Integrated controller for simple on-screen programming and data logging
- 4. Stackable for more capacity with same footprint
- 5. Optional copper chamber available

More options, including O₂ control and High Temperature Disinfection



Perforated shelves come standard on all Galaxy CO₂ Incubators



Galaxy R Series LCD display, standard on Galaxy 170 R and Galaxy 48 R models

Description

Galaxy® 170 R CO₂ incubators are high-capacity, 170 liter incubators that provide superior quality, outstanding performance and intuitive operation. These models can be conveniently placed on or under the bench or even double stacked, making them ideal for a wide range of specialized and traditional applications. Galaxy® 170 R models provide a tremendous amount of usable space that can be optimized with options including High Temperature Disinfection, O₂ control, split inner doors, and more. Galaxy® 170 R incubators feature an integrated controller for simple on-screen programming and data logging.

Product features

- > Standard features: Sealed inner glass door, reliable IR CO₂ sensor, RS-232 communication port, 25 mm access ports
- > Two O₂ control options (0.1 – 19 %, 1 – 19 %) for hypoxic studies, also available with split inner doors
- > Further Options: High Temperature Disinfection (4 hour at 120 °C), Copper chamber and interior for optimized protection against contamination, humidity alert package
- > Fanless design offers more usable space and eliminates the fan as a common, and often recurring source of contamination
- > Six-sided direct heating system provides a uniform incubated environment to gently bathe cells
- > Deep-drawn, easy-to-clean stainless steel chamber eliminates seams or welds, removing potential sources of contamination
- > Low gas consumption saves money

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.





New Brunswick™ Galaxy® 170 R

Technical specifications	
Model	New Brunswick™ Galaxy® 170 R
Capacity	170 L
Dimensions (W x D x H)	27.8 x 28 x 33.2 in / 70.8 x 71.1 x 84.5 cm
Dimensions internal (W x D x H)	21 x 17.5 x 27.2 in / 53.3 x 44.4 x 69.1 cm
Weight w/o accessories	198 lb / 89.9 kg
Communication interface	RS-232
Display	LCD
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B, U, F, S (x2)
Temperature range	Ambient +4 °C to 50 °C
Temperature control	± 0.1 °C
Temperature stability at 37 °C	± 0.1 °C
Temperature uniformity	± 0.3 °C
CO ₂ range	0.2 – 20 %
CO ₂ control	± 0.1 %
CO ₂ stability at 5 % CO ₂	± 0.2 %
CO ₂ uniformity	± 0.1 %
0.1 – 19 % O ₂ control	optional
1 – 19 % O ₂ control	optional
Access port, 25 mm	standard
BioCommand® software	optional
BMS relay	standard
Copper chamber	optional
Display readout	Temperature and CO ₂ level, 72-hour data/chart logger, alarm settings
High Temperature Disinfection (4 hours at 120 °C)	optional
Humidity alert and monitoring package	optional
Number of shelves	4 (8 optional)
Number of shelving racks	8
On-board data logging	standard
Perforated shelves	standard
Sealed inner glass doors	standard
4 split inner doors	optional
8 split inner doors	optional

Ordering information		
Description	Catalog No.	List USD
New Brunswick™ Galaxy® 170 R, 170 L, Stock		
120 V/60 Hz, Standard	CO17201005	\$ 9,167.00
120 V/60 Hz, 1-19 % O ₂ Control	CO17221005	10,595.00
120 V/60 Hz, High-Temp Disinfection	CO17211005	9,750.00
120 V/60 Hz, High-Temp Disinfection, 4-Split Inner Door	CO17214005	11,078.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control	CO17231005	11,050.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 4-Split Inner Door	CO17234005	12,380.00

Ordering information		
Description	Catalog No.	List USD
New Brunswick™ Galaxy® 170 R, 170 L, Built to Order		
120 V/60 Hz, 4-Split Inner Door	CO17204005	\$10,479.00
120 V/60 Hz, 8-Split Inner Door	CO17208005	10,962.00
120 V/60 Hz, 1-19 % O ₂ Control, 4-Split Inner Door	CO17224005	11,907.00
120 V/60 Hz, 1-19 % O ₂ Control, 8-Split Inner Door	CO17228005	12,390.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control	CO17211045	11,697.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, 4-Split Inner Door	CO17214045	13,241.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, 4-Split Inner Door, Copper Chamber	CO17214055	16,307.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, 4-Split Inner Door, Humidity Package	CO17214065	14,490.00
120 V/60 Hz, High-Temp Disinfection, 0.1-19 % O ₂ Control, 8-Split Inner Door	CO17218045	13,482.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, Humidity Package	CO17231015	12,569.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, Copper Chamber	CO17231025	14,364.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, Humidity Package, Copper Chamber	CO17231035	15,855.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 4-Split Inner Door, Humidity Package	CO17234015	13,860.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 4-Split Inner Door, Copper Chamber	CO17234025	15,687.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 4-Split Inner Door, Humidity Package, Copper Chamber	CO17234035	17,052.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 8-Split Inner Door	CO17238005	12,863.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 8-Split Inner Door, Humidity Package	CO17238015	14,343.00
120 V/60 Hz, High-Temp Disinfection, 1-19 % O ₂ Control, 8-Split Inner Door, Humidity Package, Copper Chamber	CO17238035	17,651.00
120 V/60 Hz, High-Temp Disinfection, Humidity Package	CO17211015	11,246.00
120 V/60 Hz, High-Temp Disinfection, Copper Chamber	CO17211025	12,905.00
120 V/60 Hz, High-Temp Disinfection, Humidity Package, Copper Chamber	CO17211035	14,564.00
120 V/60 Hz, High-Temp Disinfection, 4-Split Inner Door, Humidity Package	CO17214015	12,569.00
120 V/60 Hz, High-Temp Disinfection, 4-Split Inner Door, Copper Chamber	CO17214025	14,364.00
120 V/60 Hz, High-Temp Disinfection, 4-Split Inner Door, Humidity Package, Copper Chamber	CO17214035	15,656.00
120 V/60 Hz, High-Temp Disinfection, 8-Split Inner Door	CO17218005	11,561.00
120 V/60 Hz, High-Temp Disinfection, 8-Split Inner Door, Humidity Package	CO17218015	13,041.00
120 V/60 Hz, High-Temp Disinfection, 8-Split Inner Door, Humidity Package, Copper Chamber	CO17218035	16,338.00



New Brunswick™ Galaxy® 170 S



Galaxy® S Series LED Display, standard on 170 S



Optional split-inner doors provide easy access to your samples without completely opening the chamber

Description

Galaxy® 170 S CO₂ incubators are high-capacity, 170 liter incubators that provide superior quality, outstanding performance, and intuitive operation. These models can be conveniently placed on or under the bench or even double stacked, making them ideal for a wide range of specialized and traditional applications. Galaxy® 170 S models provide a tremendous amount of usable space that can be optimized with options including High Temperature Disinfection, split inner doors, and more.

Product features

- > Standard features: Sealed inner glass door, reliable IR CO₂ sensor, RS-232 communication port, 25 mm access ports
- > Optional High Temperature Disinfection (4 hour at 120 °C)
- > Available with split inner doors
- > Fanless design offers more usable space and eliminates the fan as a common, and often recurring source of contamination
- > Six-sided direct heating system provides a uniform incubated environment to gently bathe cells
- > Deep-drawn, easy-to-clean stainless steel chamber eliminates seams or welds, removing potential sources of contamination
- > Low gas consumption saves money



New Brunswick™ Galaxy® 170 S

Technical specifications	
Model	New Brunswick™ Galaxy® 170 S
Capacity	170 L
Dimensions (W x D x H)	27.8 x 28 x 33.2 in / 70.8 x 71.1 x 84.5 cm
Dimensions internal (W x D x H)	21 x 17.5 x 27.2 in / 53.3 x 44.4 x 69.1 cm
Weight w/o accessories	198 lb / 89.9 kg
Communication interface	RS-232
Display	LED
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B, U, F, S (x2)
Temperature range	Ambient +4 °C to 50 °C
Temperature control	± 0.1 °C
Temperature stability at 37 °C	± 0.1 °C
Temperature uniformity	± 0.3 °C
CO ₂ range	0.2 – 20 %
CO ₂ control	± 0.1 %
CO ₂ stability at 5 % CO ₂	± 0.2 %
CO ₂ uniformity	± 0.1 %
Access port, 25 mm	standard
BioCommand® software	optional
BMS relay	standard
Display readout	Temperature and CO ₂ level
High Temperature Disinfection (4 hours at 120 °C)	optional
Number of shelves	4 (8 optional)
Number of shelving racks	4 (8 optional)
Perforated shelves	standard
Sealed inner glass doors	standard
4 split inner doors	optional
8 split inner doors	optional

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Galaxy® 170 S, 170 L, Stock		
120 V/60 Hz, Standard	C017001005	\$6,783.00
120 V/60 Hz, High-Temp Disinfection	C017011005	7,360.00
120 V/60 Hz, High-Temp Disinfection, 4-Split Inner Door	C017014005	8,660.00
New Brunswick™ Galaxy® 170 S, 170 L, Built to Order		
120 V/60 Hz, Standard, 4-Split Inner Door	C017004005	8,096.00

i For more information go to www.eppendorf.com





CO₂ Incubators Accessories

CO ₂ Incubators Accessories		
Description	Catalog No.	List USD
CO ₂ supply line filters (2)	P0628-5020	\$ 64.00
Autozero port filter	P0628-5060	50.00
In-line pressure regulator, for all gases	P0628-5030	162.00
CO ₂ cylinder auto-changeover controller	P0628-5000	1,166.00
Galaxy® CO ₂ gas analyzer	P0628-6150	2,132.00
Galaxy® CO ₂ and O ₂ gas analyzer	P0628-6831	2,720.00
Galaxy® CO ₂ , O ₂ , and RH gas analyzer	P0628-7890	2,888.00
Temperature probe, 5 mm tip for gas analyzer	P0628-7881	100.00
Temperature probe, 100 mm tip for gas analyzer	P0628-7880	229.00
O ₂ Sensor, for Galaxy® CO ₂ Incubator	P0628-5790	299.00

Galaxy® 48 R shelves, pans and stacking stand		
Description	Catalog No.	List USD
Lower stacking frame, with casters	6705070103	Inquire
Upper stacking frame	6705070111	Inquire
Lower and upper stacking frame, with casters	48Stack	Inquire
Under bench stand	6705070120	Inquire
2 split inner door	6705851040	Inquire
Multi-position shelf rack	6705851016	Inquire
Additional shelf, perforated	P0628-5080	\$159.00
Additional humidity tray, stainless steel	P0628-5940	306.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Galaxy® 170 R / Galaxy® 170 S, shelves, pans and stacking stand		
Description	Catalog No.	List USD
Lower stacking frame, with casters	6710070219	\$ 980.00
Upper stacking frame	6710070200	320.00
Lower and upper stacking frame, with casters	170Stack	1,300.00
Multi-position shelf rack (standard on Galaxy® 170 R, optional on Galaxy® 170 S)	P0628-6390	269.00
Additional shelves (2), perforated	6710859009	620.00
4 split inner doors, retrofittable	6710866005	1,680.00
8 split inner doors, retrofittable	6710868008	3,054.80



New Brunswick™ S41i



Description

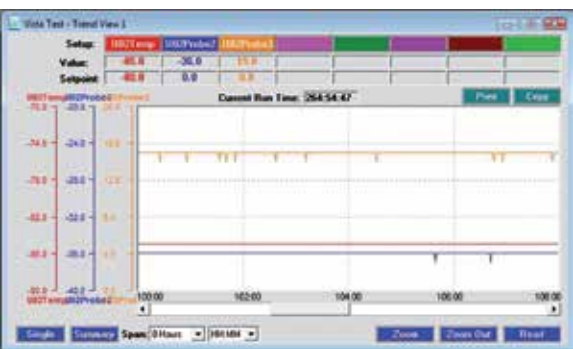
The New Brunswick S41i is the only CO₂ incubator with a shaker inside. The S41i precisely controls temperature, shaking speed, and CO₂, providing the ideal environment for growing mammalian and stem cells in culture. Accepts flasks up to 4 liters. Standard perforated shelf allows for static incubation at the same time as shaking and a second static shelf can be added as an option. The world famous triple eccentric drive provides stable, uniform and vibration free motion – connected to the shaking platform by four encapsulated support rods. The drive mechanism is located below the chamber ensuring that heat generated by the drive does not affect the critical environment within the chamber. The intuitive touch screen display allows you to easily operate and monitor performance.

For ordering information, options and accessories see page 422 (shaker section).

Product features

- > Temperature range from 4 °C above ambient to 50 °C
- > Shaking speeds between 25 – 400 rpm, 25 – 300 rpm if stacked, provides versatility for culturing a wide range of cell types
- > Large 14 in x 24 in (35.6 x 61 cm) platform accommodates flasks up to 4 liters providing flexibility with your cultures
- > Single or double stacked for increased capacity
- > Sealed glass inner door saves valuable gasses while maintaining the perfect environment for your cells
- > Standard High Temperature Disinfection provides optimized protection against contamination
- > Intuitive touch screen provides for precise control of the culturing environment
- > Perforated shelf allows for static incubation at the same time as shaking

BioCommand® SFI Automated Data Logging Software



Graphical representation of the output

Description

The BioCommand SFI software package is designed specifically for standard laboratory equipment including shakers and CO₂ incubators. The software package allows you to track key operational information such as time, temperature, shaking speed, CO₂ concentrations and humidity.

Product features

- > Track the operational parameters of your choice with the option to design and save templates
- > Monitor multiple units from the same PC
- > Trend and archive critical data including temperature, agitation speed and gas concentration for up to 32 units simultaneously
- > Provides indications of alarm conditions identified by the product
- > Ability to email or text message alarm events

Ordering information

Description	Catalog No.	List USD
BioCommand® SFI Automated Data Logging Software		
CO ₂ incubator package	M1291-1001	\$1,722.00
CO ₂ incubator cable, 4.5 m	P0620-7012	205.00
RS-232 to USB converter, 4-port	P0460-7751	555.00
RS-232 to USB converter, 8-port	P0460-7750	905.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.

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Email: info@eppendorf.com · www.eppendorf.com





CO₂ Incubator Performance Plans

Value of Service

CO₂ incubators are the pivotal instruments in cell culture labs. They feature complex, dynamic control systems to maintain user-defined culturing parameters. Accurate measurement and control of multiple environmental variables is necessary in order to optimize cell growth and proliferation.

Our CO₂ Incubator service offerings ensure that your culturing environment is reliably maintained, maximizing consistency and optimizing culturing performance.

Long-term benefits of performance plans

- > Reliable system operation over the system’s lifetime
- > GLP compliant documentation

Performance Plans Service features

- > Eppendorf customer care and quality commitment
- > Genuine and quality inspected Eppendorf parts
- > Certified service reports

Preventive Maintenance

CO₂ Incubator Performance Plans include a choice of preventive maintenance protocols designed to check, validate and to promote continuous and stable incubator performance, optimizing instrument conformity with programmed culturing parameters.

The Essential Check includes a check of all fundamental functions of the product. This includes a check of the installation environment as well as validation and adjustment of operating parameters to Eppendorf specifications.

The Advanced Maintenance is designed to provide a complete preventive maintenance service to safeguard the performance of your system. This includes maintenance of all internal and external equipment and fittings, a full functional test, and validation and adjustment of all operating parameters to Eppendorf specifications.

Preventive Maintenance (PM)	Catalog No.
Essential Check	0082060003
Advanced Maintenance	0082060004

Advantage Service

The Advantage Service is designed to help plan in advance to protect your system. Advantage Service includes labor and travel for two visits; a scheduled preventive maintenance and an unscheduled single repair visit. You may use both visits for repairs, if needed, but only one of the visits may be a PM. Advantage Service does not include, but provides a discount on parts for the PM and any additional repair service.

Advantage Service Agreement (1 year)	Catalog No.
Advantage Service	ADVSEVCO2

Premium Service

The Premium Service is a comprehensive service agreement designed to provide peace of mind support for your system. Premium Service includes a complete preventive maintenance as well as all parts, labor, and travel required to maintain the system during the contract period.

Premium Service Agreement (1 year)	Catalog No.
Premium Service	0082060005

Certification Services

Installation Qualification (IQ) and Operational Qualification (OQ) certification services ensure your Quality Management requirements are fulfilled, providing you with qualified assurance that your CO₂ incubator is functioning correctly, in accordance with manufacturer’s specifications.

Certification	Catalog No.
Installation Qualification	0082060007
Operational Qualification	0082060008
Combined IQ/OQ Service	0082060009

Extended Warranty

Your Galaxy CO₂ Incubator comes with a 2 year warranty which covers all parts and labor should the system ever need repair. You may also purchase additional years of warranty coverage to take effect once the manufacturer’s warranty period has elapsed. The Extended Warranty provides the same coverage, terms, and conditions as the original warranty. Depending on the system and location, shipment to and from a service center or travel on site by Field Service is included. The Extended Warranty does not include a preventive maintenance.

Extended Warranty (1 year)	Catalog No.
Galaxy 48 R or 48 S	EXTW-48R/S
Galaxy 170 R or 170 S	EXTW-170R/S





Model	Innova® 40/40R	Innova 42/42R	Innova 43/43R	Innova 44/44R
Page(s)	418	424	426	428
Dimensions (W x D x H)	22 x 30 x 24 in / 55.9 x 76.2 x 61 cm	32.3 x 29.7 x 32.3 in / 62 x 75.4 x 82 cm	45.5 x 20 x 40.6 in / 115.6 x 81.3 x 103.1 cm	53.1 x 33.2 x 78 in / 135 x 87.3 x 66 cm
External height (with door open)	40 in / 101.6 cm	–	65 in / 165.1 cm	47 in / 119.3 cm
External depth (with lid/door open)	–	51.6 in / 131 cm	–	–
Weight w/o accessories	133 lb / 60 kg	217 lb / 99 kg	445 lb / 202 kg	525 lb / 238 kg
Audible and visual alarms	yes	yes	yes	yes
Available program modes	> Constant speed and temperature > Timed shaking > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Timed shaking > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Timed shaking > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Timed shaking > Programmable multi-steps > RS-232 control
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
cETLus and CE marked	yes	yes	yes	yes
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	B	B, U, S (x2)	F	F, S (x3)
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
Platform size	18 x 18 in / 46 x 46 cm	18 x 18 in / 46 x 46 cm	30 x 18 in / 76 x 46 cm	30 x 18 in / 76 x 46 cm
Cat. No. Universal platform	M1250-9902	M1250-9902	M1250-9920	M1282-9904
Slide out platform	no	no	no	yes
Space saving glide up doors	no	no	no	yes
Speed range	25–500 rpm	25–400 rpm (300 rpm when stacked and using flasks larger than 500 mL)	25–500 rpm	25–400 rpm
Steps per program	15	15	15	15
Stored programs	4	4	4	4
Temperature range	5°C above ambient to 80°C. (Innova 40R: 15°C below ambient to 80°C)	5°C above ambient to 80°C. (Innova 43R: 20°C below ambient to 80°C)	5°C above ambient to 80°C. (Innova 43R: 20°C below ambient to 80°C)	5°C above ambient to 80°C. (Innova 44R: 20°C below ambient to 80°C)
Timer	0:01–99.59 hrs, continuous	0:01–99.59 hrs, continuous	0:01–99.59 hrs, continuous	0:01–99.59 hrs, continuous

Product appearance, specifications, and/or prices are subject to change without notice.



I24/I24R	I26/I26R	Excella E24/E24R	Excella E25/E25R	S41i
430	432	436	438	420
22 x 30 x 24 in / 56 x 76.2 x 61 cm	50.5 x 30.3 x 27.6 in / 128.3 x 77 x 70 cm	22 x 30 x 24 in / 56 x 76.2 x 61 cm	50 x 30.5 x 41.7 in / 127 x 77 x 105.9 cm	33.4 x 32.8 x 28.7 in / 84.8 x 83.4 x 73 cm
40 in / 101.6 cm	–	40 in / 101.6 cm	65 in / 165.1 cm	–
–	49.4 in / 125.4 cm	–	–	57 in / 144.8 cm
133 lb / 60 kg	370 lb / 168 kg	133 lb / 60 kg	377 lb / 171 kg	335 lb / 152 kg
yes	yes	yes	yes	yes
> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control
Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Heavy-duty with permanently lubricated ball bearings	Heavy-duty with permanently lubricated ball bearings	Triple-eccentric drive mechanism with counter balancing to provide vibration free operation
yes		yes	yes	yes
B	S (x3)	B	F	U, F, S (x2)
Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
18 x 18 in / 46 x 46 cm	30 x 18 in / 76 x 46 cm	18 x 18 in / 46 x 46 cm	30 x 18 in / 76 x 46 cm	14 x 24 in / 36 x 61 cm
Cat. No. M1250-9902	M1324-9904	M1250-9902	M1250-9920	M1334-9920
no	yes	no	no	no
no	no	no	no	no
50–400 rpm	25–400 rpm	50–400 rpm	50–400 rpm	25–400 rpm
–	–	–	–	–
–	–	–	–	–
5°C above ambient to 60°C. (I24R: 15°C below ambient to 60°C)	5°C above ambient to 60°C. (I26R: 15°C below ambient to 60°C)	7°C above ambient to 60°C. (Excella 24R: 15°C below ambient to 60°C)	7°C above ambient to 60°C. (Excella 25R: 15°C below ambient to 60°C)	4°C above ambient to 50°C
0:01–99.59 hrs	0:01–99.59 hrs, continuous	0:01–99.59 hrs	0:01–99.59 hrs	0.1–168.9 hrs, continuous



New Brunswick™ Innova® 40/40R



Description
The Innova 40 incubated and 40R incubated and refrigerated benchtop shakers provide years of dependable operation. The cast iron New Brunswick triple-eccentric counterbalanced drive is specifically designed to support high-speed applications and heavy workloads. Innova 40 incubated shakers provide very broad temperature capabilities for culturing a wide variety of organisms in flasks up to 3 liters. Refrigeration module is built into the Innova 40R.

- Product features**
- > Exceptionally quiet operation provides a favorable work environment
 - > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years 1.9 cm and 2.5 cm (3/4 in and 1 in) orbits are available to meet your application needs
 - > Compact benchtop model—fits easily on the bench and holds flasks up to 3 L
 - > Wide temperature range: Innova 40: 5 °C above ambient to 80 °C. (Innova 40R: 15 °C below ambient to 80 °C)
 - > Programmable Innova controls—automatically changes temperature and speed at programmed and timed intervals
 - > Clear cover allows easy viewing of the cultures and lifts easily to access all samples
 - > Versatile 18 x 18 in / 46 x 46 cm accessory platform (sold separately) accommodates flasks up to 3 L as well as test tube racks and Microplate holders
 - > Shaking speeds between 25–500 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types
 - > Certified. Meets cETL, UL, CSA and CE standards

- Applications**
- > Increase Oxygen Transfer rate allowing cultures to grow quicker and healthier
 - > Grow bacterial, insect, yeast and plant cells in a controlled environment
 - > Screen culture media for optimal growth
 - > Grow seed cultures for fermentors/bioreactors

Technical specifications		
Model	New Brunswick™ Innova® 40	New Brunswick Innova 40R
External height (with door open)	101.6 cm (40 in)	101.6 cm (40 in)
Timer	0:01–99.59 hrs, continuous	0:01–99.59 hrs, continuous
Dimensions (W x D x H)	22 x 30 x 24 in / 55.9 x 76.2 x 61 cm	22 x 30 x 24 in / 55.9 x 76.2 x 61 cm
Weight w/o accessories	133 lb / 60.3 kg	175 lb / 79.4 kg
Temperature range	Ambient + 5°C to 80°C	15°C below ambient to 80°C (min. 4°C)
Audible and visual alarms	yes	yes
Available program modes	> Constant speed and temperature > Timed shaking > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Timed shaking > Programmable multi-steps > RS-232 control
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Multi-step programming	yes	yes
Orbit	1.9/2.5 cm (3/4 in/1 in)	1.9/2.5 cm (3/4 in/1 in)
Platform size	18 x 18 in / 46 x 46 cm	18 x 18 in / 46 x 46 cm
Refrigerated	no	yes
Speed range	25–500 rpm	25–500 rpm
Stored programs	4	4
Steps per program	15	15
Temperature uniformity	± 0.25°C at 37°C	± 0.25°C at 37°C

Product appearance, specifications, and/or prices are subject to change without notice.



Ordering information		
Description	Catalog No.	List USD
New Brunswick™ Innova® 40		
120 V/50 – 60 Hz, orbit diameter 1.9 cm (3/4 in)	M1299-0080	\$ 8,705.00
120 V/50 – 60 Hz, orbit diameter 2.5 cm (1 in)	M1299-0090	8,705.00
New Brunswick™ Innova® 40R		
120 V/60 Hz (US), orbit diameter 1.9 cm (3/4 in)	M1299-0084	10,200.00
120 V/60 Hz (US), orbit diameter 2.5 cm (1 in)	M1299-0094	10,200.00
Remote alarm	M1320-8029	231.00
Drip pan, for universal platform M1250-9902	M1250-9906	221.00
Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R, 18 x 18 in (45.7 x 45.7 cm), phenolic resin unless otherwise stated		
Universal platform	M1250-9902	855.00
50 mL Erlenmeyer flask dedicated platform	M1194-9903	1,070.00
125 mL Erlenmeyer flask dedicated platform	M1194-9904	910.00
250 mL Erlenmeyer flask dedicated platform	M1194-9905	940.00
500 mL Erlenmeyer flask dedicated platform	M1194-9906	910.00
1 L Erlenmeyer flask dedicated platform	M1194-9907	870.00
2 L Erlenmeyer flask dedicated platform	M1194-9908	870.00
2.8 L Fernbach flask dedicated platform	M1233-9932	895.00
Sticky pad platform, sticky pads sold separately	M1250-9903	610.00
Quick-change platform kit, enables platform attachment without tools	M1192-9901	500.00
Utility carrier, holds racks and vessels between rubber-cushioned cross bars	M1194-9909	765.00
Utility tray, with non-skid rubber surface	M1194-9910	700.00
Rod kit, for utility carrier (one additional rod)	M1194-9923	237.00



New Brunswick™ S41i



1. Glass inner door allows viewing of the cultures without compromising sample and environmental integrity

2. World famous triple eccentric drive provides stable, uniform and vibration free motion – connected to the shaking platform by four encapsulated rods, it's located below the chamber ensuring that heat generated by the drive does not affect the critical environment within the chamber

3. Easy-to-clean seamless stainless steel chamber eliminates a potential source of contamination
4. Removable shelf lets you simultaneously shake suspension cells and incubate adherent cells under the same conditions

5. The advanced and intuitive touch screen controls not only provide a clear and accurate determination of the conditions your cells are exposed to but allows you to track performance over time as well as many additional features and functions



Description
The New Brunswick S41i is the only CO₂ incubator with an Eppendorf shaker inside. The S41i precisely controls temperature, shaking speed, and CO₂, providing the ideal environment for growing mammalian and stem cells in culture. Accepts flasks up to 4 liters. Standard perforated shelf allows for static incubation at the same time as shaking and a second static shelf can be added as an option. The world famous triple eccentric drive provides stable, uniform and vibration free motion – connected to the shaking platform by four encapsulated support rods. The drive mechanism located below the chamber ensuring that heat generated by the drive does not affect the critical environment within the chamber. The intuitive touch screen display and controls allow you to operate and monitor performance.

- Applications**
- > Culturing of suspension cells requiring gentle agitation
 - > Incubating adherent cells on the shelf included with the unit: adding a 2nd static shelf and using the shaking platform as a 3rd shelf
 - > Adherent cells such as Stem cells that require both incubation and periodic gentle shaking

- Product features**
- > Temperature range from 4 °C above ambient to 50 °C
 - > Shaking speeds between 25 – 400 rpm, 25 – 300 rpm if stacked, provides versatility for culturing a wide range of cell types
 - > Large 35.6 x 61 cm (14 in x 24 in) platform accommodates flasks up to 4 liters providing flexibility with your cultures
 - > Single or double stacked for increased capacity
 - > Inner and outer door saves valuable gasses while maintaining the perfect environment for your cells
 - > Standard High Temperature Disinfection provides a sterile surface protecting your cells
 - > Intuitive touch screen controls provide for precise control of the culturing environment
 - > Perforated shelf allows for static incubation at the same time as shaking





New Brunswick™ S41i

Technical specifications	
Model	New Brunswick S41i
External depth (with lid/door open)	57 in / 144.8 cm
Dimensions internal (W x D x H)	27.2 x 17.5 x 21 in / 69.1 x 44.4 x 53.3 cm
Display	Touchscreen
Timer	Timer is available allowing user to set incubation and shaking times
Dimensions (W x D x H)	33.4 x 32.8 x 28.7 in / 84.8 x 83.4 x 73 cm
Weight w/o accessories	335 lb / 152 kg
Temperature range	Ambient + 5°C to 50°C
Access port (25 mm)	yes
Audible and visual alarms	yes
Available program modes	> Constant speed and temperature > Timed shaking > RS-232 control
Balanced drive mechanism	Triple-eccentric drive mechanism with counter balancing to provide vibration free operation
BMS relay	standard
CO ₂ control	± 0.1%
CO ₂ range	0.2–20%
CO ₂ stability at 5% CO ₂	± 0.2%
CO ₂ uniformity	± 0.1%
Communication interface	Ethernet
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	U, F, S (x2)
High Temperature Disinfection (4 hours at 120°C)	yes
Memory	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor
Number of shelves	1 (2nd optional)
On-board data logging	yes
Orbit	2.5 cm (1 in)
Perforated shelves	yes
Platform size	14 x 24 in / 36 x 61 cm
Sealed inner glass doors	yes
Speed range	25–400 rpm
Temperature control	± 0.1°C
Temperature stability at 37°C	± 0.1°C
Temperature uniformity	± 0.25°C at 37°C

Ordering information

Description	Catalog No.	List USD
New Brunswick™ S41i, 170 L, CO ₂ incubator shaker with inner shelf and touch screen control, 120 V/60 Hz (US), orbit diameter 2.5 cm (1 in)	S41i-120-0100	\$16,535.00
Interchangeable platforms for New Brunswick™ S41i, 14 x 24 in (35.6 x 61 cm)		
Universal platform	M1334-9920	920.00
125 mL Erlenmeyer flask dedicated platform, comes complete with 32 clamps installed	M1334-9921	1,060.00
250 mL Erlenmeyer flask dedicated platform, comes complete with 24 clamps installed	M1334-9922	990.00
500 mL Erlenmeyer flask dedicated platform, comes complete with 15 clamps installed	M1334-9923	975.00
1 L Erlenmeyer flask dedicated platform, comes complete with 11 clamps installed	M1334-9924	965.00
2 L Erlenmeyer flask dedicated platform, comes complete with 6 clamps installed	M1334-9925	965.00
2.8 L Erlenmeyer flask dedicated platform, comes complete with 3 clamps installed	M1334-9926	965.00
4 L Erlenmeyer flask dedicated platform, comes complete with 3 clamps installed	M1334-9927	965.00
Stacking kit, allows up to 2 each New Brunswick™ S41i shakers to be stacked one on top of the other	P0628-6502	1,617.00
Additional shelf for New Brunswick™ S41i, perforated, can easily be added to the New Brunswick® S41i for static cell culture of adherent cells	P0628-6181	256.00
Sticky Pad Adaptor Kit	M1250-9504	195.00
Sticky Pad, 8 x 8 in (20 x 20 cm)	M1250-9700	81.50

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com





New Brunswick™ Innova® 42/42R



Description

The Innova 42 incubated and 42R incubated and refrigerated shakers are our most versatile incubator shakers. The programmable Innova 42 & 42R provide exceptional convenience allowing you to simultaneously shake and static incubate cultures under the same conditions.

Product features

- > Our most versatile shaker fits on the bench, under the counter, on the floor or double stacked to provide large capacity in minimal space
- > Programmable Innova controls automatically changes temperature, speed and optional photosynthetic and UV germicidal lights at timed intervals
- > Accommodates flasks up to 4 L
- > Wide temperature range: Innova 42: 5°C above ambient to 80°C. (Innova 42R: 20°C below ambient to 80°C) Maximum temperature is 60°C with optional humidity monitor and 70°C with optional photosynthetic lights.
- > Large viewing window and internal light provides easy viewing of samples without the need to open the door
- > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years
- > 1.9 cm (3/4 in) and 2.5 cm (1 in) orbits are available to meet your application needs
- > Built-in water reservoir humidifies chamber to reduce sample evaporation, while also protecting unit from spills, includes a drain for easy cleaning
- > Shaking speeds between 25–400 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types.
- > Shaking speeds when stacked may be lower.
- > Versatile 46 x 46 cm (18 x 18 in) accessory platform (sold separately) accommodates flasks up to 4 L as well as test tube racks and Microplate holders

Technical specifications		
Model	Innova® 42	Innova® 42R
External depth (with lid/door open)	51.6 in / 131 cm	51.6 in / 131 cm
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W x D x H)	32.3 x 29.7 x 32.3 in / 62 x 75.4 x 82 cm	32.3 x 29.7 x 32.3 in / 62 x 75.4 x 82 cm
Weight w/o accessories	217 lb / 98.5 kg	267 lb / 121 kg
Temperature range	Ambient +5 °C to 80 °C	20 °C below ambient to 80 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	> Constant speed and temperature > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Programmable multi-steps > RS-232 control
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9/2.5 cm (3/4/1 in)	1.9/2.5 cm (3/4/1 in)
Platform size	18 x 18 in / 46 x 46 cm	18 x 18 in / 46 x 46 cm
Speed range ¹⁾	25 – 400 rpm; 25 – 300 rpm when stacked and using flasks larger than 500 mL	25 – 400 rpm; 25 – 300 rpm when stacked and using flasks larger than 500 mL
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

¹⁾ Baffled flasks will reduce maximum speed.



Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 42		
120 V/60 Hz (US), orbit diameter 1.9 cm (3/4 in)	M1335-0000	\$10,110.00
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1335-0010	10,110.00
New Brunswick™ Innova® 42R		
120 V/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1335-0004	11,480.00
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1335-0014	11,480.00
Photosynthetic light bank, programmable, Innova® 42R only	M1335-0300	1,450.00
UV germicidal light, programmable, Innova® 42R only	M1335-0400	1,450.00
Humidity Monitor, for Innova® 42/42R	M1335-0500	725.00
12-port gassing manifold, for Innova® 42/42R	M1335-0600	705.00
Remote alarm	M1320-8029	231.00
Drip pan, for universal platform M1250-9902	M1250-9906	221.00
Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R, 18 x 18 in (45.7 x 45.7 cm), phenolic resin unless otherwise stated		
Universal platform	M1250-9902	855.00
50 mL Erlenmeyer flask dedicated platform	M1194-9903	1,070.00
125 mL Erlenmeyer flask dedicated platform	M1194-9904	910.00
250 mL Erlenmeyer flask dedicated platform	M1194-9905	940.00
500 mL Erlenmeyer flask dedicated platform	M1194-9906	910.00
1 L Erlenmeyer flask dedicated platform	M1194-9907	870.00
2 L Erlenmeyer flask dedicated platform	M1194-9908	870.00
2.8 L Fernbach flask dedicated platform	M1233-9932	895.00
Sticky pad platform, sticky pads sold separately	M1250-9903	610.00
Quick-change platform kit, enables platform attachment without tools	M1192-9901	500.00
Culture drawer, prevents plates from drying	M1335-0501	835.00
Stacking kit, for stacking Innova® 42/42R units	M1335-0800	360.00
Utility carrier, holds racks and vessels between rubber-cushioned cross bars	M1194-9909	765.00
Stacking kit, for stacking Innova® 4200/4230 units on top of Innova® 42/42R shakers	M1335-0810	485.00
Utility tray, with non-skid rubber surface	M1194-9910	700.00
Rod kit, for utility carrier (one additional rod)	M1194-9923	237.00
Additional perforated shelf & brackets, for Innova® 42/42R	M1335-0080	236.00



New Brunswick™ Innova® 43/43R



Description
The Innova 43 incubated and Innova 43R with added refrigeration are the perfect choice for handling large quantities or large volumes of cultures with precision and ease. The cast iron triple-eccentric counterbalanced drive is specifically designed to support high-speed applications and heavy workloads.

- Product features**
- > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years
 - > 2.5 and 5 cm (1 and 2 in) offered to meet your application needs
 - > Console style shaker/incubator with triple-eccentric drive—provides large capacity shaking for flasks up to 6 L
 - > Wide temperature range: Innova 43: 5°C above ambient to 80°C. (Innova 43R: 20°C below ambient to 80°C) Maximum temperature is 60°C with optional humidity monitor and 70°C with optional photosynthetic lights.
 - > Programmable Innova controls—automatically changes temperature, speed and optional photosynthetic and UV germicidal lights at timed intervals
 - > Top mounted controls and display—for easy, ergonomic viewing and setting
 - > Foot pedal release with easy opening lid—provides hands free operation
 - > Large 30 × 18 in / 76 × 46 cm platform size provides increased flexibility with the number and size of cultures (sold separately)
 - > Shaking speeds between 25–500 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types
 - > Built-in water reservoir humidifies chamber to reduce sample evaporation, while also protecting unit from spills, includes a drain for easy cleaning.

Technical specifications		
Model	Innova® 43	Innova® 43R
External height (with lid/door open)	65 in / 165.1 cm	65 in / 165.1 cm
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W × D × H)	45.5 × 20 × 40.6 in / 115.6 × 81.3 × 103.1 cm	45.5 × 20 × 40.6 in / 115.6 × 81.3 × 103.1 cm
Weight w/o accessories	445 lb / 202 kg	475 lb / 216 kg
Temperature range	Ambient +5 °C to 80 °C	20 °C below ambient to 80 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	> Constant speed and temperature > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Programmable multi-steps > RS-232 control
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)
Platform size	30 x 18 in / 76 x 46 cm	30 x 18 in / 76 x 46 cm
Speed range ¹⁾	25 – 500 at 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit	25 – 500 at 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

¹⁾ Baffled flasks will reduce maximum speed.



Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 43		
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1320-0000	\$14,750.00
120 V/60 Hz, orbit diameter 5.1 cm (2 in)	M1320-0010	14,750.00
New Brunswick™ Innova® 43R		
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1320-0004	16,760.00
120 V/60 Hz, orbit diameter 5.1 cm (2 in)	M1320-0014	16,760.00
Photosynthetic light bank, for Innova® 43R only	M1320-0300	1,450.00
UV germicidal light, in the airflow path outside the chamber reduces the bio-burden of circulated air, Innova® 43R only	M1320-0400	1,450.00
12-port gassing manifold, permits direct gassing into flasks	M1320-0500	705.00
Humidity monitor	M1320-0600	725.00
Remote alarm	M1320-8029	231.00
Interchangeable platforms for Innova® 2300/43/43R, Excella® E10/E25/E25R, 30 x 18 in (76 × 46 cm), aluminum		
Universal platform	M1250-9920	1,180.00
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,560.00
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,520.00
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,405.00
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,325.00
1 L Erlenmeyer flask dedicated platform	AG-1	1,265.00
2 L Erlenmeyer flask dedicated platform	AG-2	1,180.00
2.8 L Fernbach flask dedicated platform	AG-28	1,265.00
4 L Erlenmeyer flask dedicated platform	AG-4	1,180.00
6 L Erlenmeyer flask dedicated platform	AG-6	1,220.00
Sticky pad platform, sticky pads sold separately	M1250-9904	800.00
Utility tray, with non-skid rubber surface	AG-00	910.00
Utility basket, for incubating/refrigerating stationary glassware	M1320-0700	171.00



New Brunswick™ Innova® 44/44R



Description
The Innova 44 incubated and 44R with added refrigeration are stackable shakers that provide very broad temperature capabilities for culturing a wide variety of organisms in flasks up to 5 L. The cast iron triple-eccentric counterbalanced drive is specifically designed to support high speed applications and heavy workloads. Refrigeration module is built into the Innova model 44R, or can be easily added to model 44, at any time.

- Product features**
- > Stackable—up to three units for maximum space savings
 - > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years
 - > 2.5 and 5 cm (1 and 2 in) orbits offered to meet your application needs
 - > Programmable Innova controls automatically changes temperature, speed and optional photosynthetic and UV germicidal lights at timed intervals
 - > Wide temperature range: Innova 44: 5°C above ambient to 80°C. (Innova 44R: 20°C below ambient to 80°C) Maximum temperature is 60°C with optional humidity monitor and 70°C with optional photosynthetic lights.
 - > Versatile 30 x 18 in / 76 x 46 cm accessory platform (sold separately) accommodates flasks up to 5 L
 - > Shaking Speeds between 25–400 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types
 - > Slide-out platform mechanism—provides easy and effortless access to flasks located in the front and back of the shaker/incubator
 - > Built-in water reservoir humidifies chamber to reduce sample evaporation, while also protecting unit from spills, includes a drain for easy cleaning.
 - > Pull-out service module allows access to all electronic and heating/cooling components, without having to unstack the units

Technical specifications		
Model	Innova® 44	Innova® 44R
External height (with lid/door open)	47 in / 119.3 cm	47 in / 119.3 cm
Timer	0.01 – 99.59 h, continuous	0.01 – 99.59 h, continuous
Dimensions (W x D x H)	53.1 x 33.2 x 78 in / 135 x 87.3 x 66 cm	53.1 x 33.2 x 78 in / 135 x 87.3 x 66 cm
Weight w/o accessories	523 lb / 238 kg	566 lb / 257 kg
Temperature range	Ambient +5 °C to 80 °C	20 °C below ambient to 80 °C
Temperature uniformity	±0.25 °C at 37 °C	±0.25 °C at 37 °C
Available program modes	> Constant speed and temperature > Programmable multi-steps > RS-232 control	> Constant speed and temperature > Programmable multi-steps > RS-232 control
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Orbit	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)
Platform size	30 x 18 in / 76 x 46 cm	30 x 18 in / 76 x 46 cm
Speed range ¹⁾	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units	25 – 400 rpm with 2.5 cm orbit; 25 – 300 rpm with 5.1 cm orbit or 2 stacked units; 25 – 250 rpm with 3 stacked units
Multi-step programming	yes	yes
Steps per program	15	15
Stored programs	4	4

¹⁾ Baffled flasks will reduce maximum speed.



Ordering information		
Description	Catalog No.	List USD
New Brunswick™ Innova® 44		
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1282-0000	\$15,500.00
120 V/60 Hz, orbit diameter 5.1 cm (2 in)	M1282-0010	15,500.00
New Brunswick™ Innova® 44R		
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1282-0004	17,715.00
120 V/60 Hz, orbit diameter 5.1 cm (2 in)	M1282-0014	17,715.00
Photosynthetic light bank, for Innova® 44R only	M1282-9922	1,450.00
12-port gassing manifold, for Innova® 44R	M1282-0291	705.00
Humidity monitor, for Innova® 44R	M1282-5011	725.00
UV germicidal light, for Innova® 44R only	M1282-9921	1,450.00
Remote alarm, for Innova® 44R	M1282-8038	310.00
Aluminum platforms for Innova® 44/44R, 30 x 18 in (76 x 46 cm), not interchangeable with other 30 x 18 in (76 x 46 cm) platforms		
Universal platform	M1282-9904	1,140.00
125 mL Erlenmeyer flask dedicated platform	M1282-9905	1,490.00
250 mL Erlenmeyer flask dedicated platform	M1282-9906	1,375.00
500 mL Erlenmeyer flask dedicated platform	M1282-9907	1,295.00
1 L Erlenmeyer flask dedicated platform	M1282-9908	1,220.00
2 L Erlenmeyer flask dedicated platform	M1282-9909	1,160.00
2.8 L Fernbach flask dedicated platform	M1282-9910	1,220.00
4 L Erlenmeyer flask dedicated platform	M1282-9911	1,160.00
Heavy duty 0.95 cm-thick aluminum plate platforms for Innova® 44/44R only, 30 x 18 in (76 x 46 cm), not interchangeable with other 30 x 18 in (76 x 46 cm) platforms. Heavy-duty platforms are recommended for shaking full loads of flasks, 1 L and larger, containing more than 20 % volume or with baffles.		
Universal platform	M1282-9915	1,365.00
1 L Erlenmeyer flask dedicated platform	M1282-9925	1,470.00
2.8 L Fernbach flask dedicated platform	M1282-9927	1,470.00
2 L Erlenmeyer flask dedicated platform	M1282-9926	1,395.00
4 L Erlenmeyer flask dedicated platform	M1282-9928	1,395.00
Aluminum platforms for Innova® 44/44R, 30 x 18 in (76 x 46 cm), not interchangeable with other 30 x 18 in (76 x 46 cm) platforms		
Sticky pad platform, sticky pads sold separately	M1282-9913	800.00
Base riser, increases the height of the shaker for easier access, for Innova® 44/44R		
10.2 cm, short	M1282-0600	655.00
40.6 cm, tall	M1282-0700	1,305.00
30.5 cm, medium	M1282-0800	1,200.00
Stacking kit, for stacking one additional 44 or 44R	M1282-0500	360.00



New Brunswick™ I-Series® I24/I24R benchtop incubator shaker



Description
Benchtop, incubated New Brunswick model I24 and incubated/refrigerated model I24R shakers feature New Brunswick’s triple-eccentric counterbalanced shaking mechanism for uniform motion, and years of quiet, dependable operation. The models I24 and I24R accommodate test tubes or flasks up to 2.8 liters in a tightly-sealed growth chamber featuring a clear acrylic lid for excellent visibility of all samples. A wide variety of platforms, clamps and test tube racks provide for unlimited flexibility.

- Product features**
- > Heavy-duty triple-eccentric counterbalanced drive provides long life, vibration-free, quiet and dependable operation
 - > Versatile 18 × 18 in / 46 × 46 cm accessory platform (sold separately) accommodates flasks up to 2.8 L as well as test tube racks and Microplate holders
 - > User-friendly keypad with large LED display is clearly visible and easy to set
 - > Wide temperature range: I24: 5 °C above ambient to 60 °C. (I24R: 15 °C below ambient to 60 °C)
 - > Shaking speeds between 50–400 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types.
 - > Clear large lid provides excellent visibility minimizing the need to open the lid
 - > Open lid cut off switch immediately stops shaking when lid is open
 - > Audible and visual alarms alert you to setpoint deviations or end of study
 - > Unique acceleration/deceleration circuit prevents sudden starts and stops protecting your cells
 - > Microprocessor controls precisely regulate temperature, speed and running time

Ordering information

Description	Catalog No.	List USD
New Brunswick Excella I24 benchtop incubator shaker		
120 V/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1344-0000	\$8,255.00
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1344-0010	8,255.00
New Brunswick Excella I24R benchtop incubator shaker		
120 V/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1344-0004	9,660.00
120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1344-0014	9,660.00
Drip pan , for universal platform M1250-9902	M1250-9906	221.00
Interchangeable platforms for Innova® 2100/40/40R/42/42R, I-Series I24/I24R, Excella® E5/E24/E24R, 18 x 18 in (45.7 × 45.7 cm), phenolic resin unless otherwise stated		
Universal platform	M1250-9902	855.00
50 mL Erlenmeyer flask dedicated platform	M1194-9903	1,070.00
125 mL Erlenmeyer flask dedicated platform	M1194-9904	910.00
250 mL Erlenmeyer flask dedicated platform	M1194-9905	940.00
500 mL Erlenmeyer flask dedicated platform	M1194-9906	910.00
1 L Erlenmeyer flask dedicated platform	M1194-9907	870.00
2 L Erlenmeyer flask dedicated platform	M1194-9908	870.00
2.8 L Fernbach flask dedicated platform	M1233-9932	895.00
Sticky pad platform , sticky pads sold separately	M1250-9903	610.00
Quick-change platform kit , enables platform attachment without tools	M1192-9901	500.00
Utility tray , with non-skid surface	M1194-9910	700.00

Technical specifications		
Model	New Brunswick™ I24	New Brunswick I24R
External height (with door open)	40 in / 101.6 cm	40 in / 101.6 cm
Timer	0:01–99.59 hrs	0:01–99.59 hrs
Dimensions (W × D × H)	22 × 30 × 24 in / 56 × 76.2 × 61 cm	22 × 30 × 24 in / 56 × 76.2 × 61 cm
Weight w/o accessories	133 lb / 60 kg	175 lb / 80 kg
Temperature range	Ambient + 5 °C to 60 °C	15 °C below ambient to 60 °C
Audible and visual alarms	yes	yes
Available program modes	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control
Balanced drive mechanism	Heavy-duty with permanently lubricated ball bearings	Heavy-duty with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	B	B
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)	1.9 cm (3/4 in)
Platform size	18 × 18 in / 46 × 46 cm	18 × 18 in / 46 × 46 cm
Refrigerated	no	yes
Speed range	50–400 rpm	50–400 rpm
Temperature uniformity	± 0.5°C at 37°C	± 0.5°C at 37°C





New Brunswick™ I26/I26R stackable incubator shaker



- Product features**
- > Wide temperature range: I26: 5 °C above ambient to 60 °C (I26R: 15 °C below ambient to 60 °C)
 - > Slide out platform provides easy access to all samples, including ones located in the back
 - > Stack up to 3 units for maximum capacity while taking up minimal space
 - > Shaking speeds between 25–400 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types
 - > User-friendly keypad with large LED display is clearly visible and easy to set
 - > Triple-eccentric counterbalanced drive and cast iron housing provides vibration and trouble free operation for years
 - > Microprocessor controls precisely regulate temperature, speed and running time
 - > Versatile 30 × 18 in / 76 × 46 cm accessory platform (sold separately) accommodates flasks up to 2.8 L
 - > Provides the ability to calibrate the speed and temperature directly through the keypad

Description
Stackable, incubated New Brunswick model I26 and incubated/refrigerated model I26R shakers feature New Brunswick’s triple-eccentric counterbalanced shaking mechanism for uniform motion, and years of quiet, dependable operation. Microprocessor controls with digital display enable easy operation and accurate setpoint regulation. A large assortment of platforms, clamps, test tube holders and other accessories allow configuration to meet your exact needs. Based on the design concepts of the Innova® shakers, the models I26 and I26R offer excellent performance at a value price.



Universal platform shown with accessory clamps, test tube racks and sticky tape.



Dedicated platforms come with clamps of one size pre-installed.

Technical specifications		
Model	New Brunswick™ I26	New Brunswick I26R
External depth (with lid/door open)	49.4 in / 125.4 cm	49.4 in / 125.4 cm
Timer	0:01–99.59 hrs, continuous	0:01–99.59 hrs, continuous
Dimensions (W × D × H)	50.5 × 30.3 × 27.6 in / 128.3 × 77 × 70 cm	50.5 × 30.3 × 27.6 in / 128.3 × 77 × 70 cm
Weight w/o accessories	370 lb / 168 kg	410 lb / 186 kg
Temperature range	Ambient + 5°C to 60°C	–15°C ambient to 60°C
Available program modes	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	S (x3)	S (x3)
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	2.5 cm (1 in)	2.5 cm (1 in)
Platform size	30 × 18 in / 76 × 46 cm	30 × 18 in / 76 × 46 cm
Refrigerated	no	yes
Slide out platform	yes	yes
Speed range	25–400 rpm	25–400 rpm
Orbit / Stacking: 1	1 unit	1 unit
Speed range: 1	25–400 rpm	25–400 rpm
Orbit / Stacking: 2	2 stacked units	2 stacked units
Speed range: 2	25–300 rpm	25–300 rpm
Orbit / Stacking: 3	3 stacked units	3 stacked units
Speed range: 3	25–250 rpm	25–250 rpm
Temperature uniformity	± 0.25°C at 37°C	± 0.25°C at 37°C

Ordering information		
Description	Catalog No.	List USD
New Brunswick I26 stackable incubator shaker, 120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1324-0000	\$13,990.00
New Brunswick I26R stackable incubator shaker, 120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1324-0004	15,980.00
I26 and I26R interchangeable platforms, slide-out, 30" × 18" aluminum. (Platforms are not interchangeable with other 30 x 18 in [76 x 46 cm] platforms). Clamps and accessories sold separately. See pages 450–453.		
Universal platform	M1324-9904	1,100.00
125 mL Erlenmeyer flask dedicated platform	M1324-9905	1,425.00
250 mL Erlenmeyer flask dedicated platform	M1324-9906	1,335.00
500 mL Erlenmeyer flask dedicated platform	M1324-9907	1,255.00
1 L Erlenmeyer flask dedicated platform	M1324-9908	1,180.00
2 L Erlenmeyer flask dedicated platform	M1324-9909	1,120.00
2.8 L Fernbach flask dedicated platform	M1324-9910	1,180.00
Sticky pad platform, (sticky pads sold separately)	M1324-9911	780.00
Optional Accessories		
Riser bases, increases the height of the shaker for easier access		
4 in base riser, short	M1324-0600	630.00
13 in base riser, medium	M1324-0800	1,160.00
17 in base riser, tall	M1324-0700	1,255.00
Stacking kit, bolts together shakers for secure mounting		
Stacking kit, for stacking one additional I26 or I26R	M1324-0500	350.00





New Brunswick™ I2500 incubated, I2500KC incubated/ refrigerated, and I2500KC with a programmable timer



- Product features**
- > Large capacity console style incubated shakers feature a 1” orbit and accepts flasks up to 6 L in volume
 - > Choose incubated, incubated refrigerated and incubated/ refrigerated with a dual temperature timer and on/off agitation cycler
 - > Includes a foot pedal for hands free opening of the lid
 - > Large viewing window to check cultures without opening the lid
 - > Ability to calibrate the speed and temperature via the key pad

Description
I2500 Series shakers are ideal for large-load requirements. This floor-mounted shaker accepts up to 6 L flasks, and features easy-open lid with foot-pedal release for hands-free operation.

Ordering information		
Description	Catalog No.	List USD
I2500, Incubated		
120 V, 60 Hz, orbit diameter 2.5 cm (1 in)	M1284-0000	\$13,540.00
I2500 KC, Incubated/Refrigerated		
120 V, 60 Hz, orbit diameter 2.5 cm (1 in)	M1284-1010	15,350.00
I2500 KC, Incubated/Refrigerated with Programmable Timer		
120 V, 60 Hz, orbit diameter 2.5 cm (1 in)	M1284-1014	16,380.00
I2500 Series interchangeable platforms. Clamps and accessories sold separately. See pages 450–453.		
Universal platform, aluminum	M1250-9920	1,180.00
Utility tray with non-skid surface	AG-00	910.00
Sticky pad platform, (sticky pads sold separately)	M1250-9904	800.00
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,560.00
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,520.00
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,405.00
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,325.00
1 L Erlenmeyer flask dedicated platform	AG-1	1,265.00
2 L Erlenmeyer flask dedicated platform	AG-2	1,180.00
2.8 L Fernbach flask dedicated platform	AG-28	1,265.00
4 L Erlenmeyer flask dedicated platform	AG-4	1,180.00
6 L Erlenmeyer flask dedicated platform	AG-6	1,220.00

Technical specifications		
Model	New Brunswick™ I2500	New Brunswick I2500KC
Platform size	30 × 18 in / 76.2 × 46 cm	30 × 18 in / 76.2 × 46 cm
Temperature range	Ambient + 7 °C to 60 °C	15 °C below ambient to 60 °C
Temperature uniformity	± 0.25 °C at 37 °C	± 0.25 °C at 37 °C
Speed	25 to 500 rpm	25 to 500 rpm
Orbit	2.5 cm (1 in)	2.5 cm (1 in)
Dimensions (W × D × H)	45 × 28 × 37 in / 114.3 × 71.1 × 94 cm	45 × 28 × 37 in / 114.3 × 71.1 × 94 cm
Net weight	410 lb / 186 kg	415 lb / 188 kg
* When using 1 unit on the floor, height is 27"		





New Brunswick™ Excella® E24/E24R



Description
The benchtop Excella E24 incubator shaker and model E24R with added refrigeration accommodate test tubes or flasks up to 2.8 liters in a tightly-sealed growth chamber featuring a clear acrylic lid for excellent visibility of all samples. A wide variety of platforms, clamps and test tube racks provide for unlimited flexibility. The Excella E24 and E24R offer field calibration of temperature and speed through the microprocessor-controlled touch pad.

- Product features**
- > Heavy-duty counterbalanced drive provides long life, vibration-free, quiet and dependable operation
 - > Versatile 18 × 18 in / 46 × 46 cm accessory platform (sold separately) accommodates flasks up to 2.8 L as well as test tube racks and Microplate holders
 - > User-friendly keypad with large LED display is clearly visible and easy to set
 - > Wide temperature range: E24: 7°C above ambient to 60°C. (E24R: 15°C below ambient to 60°C)
 - > Shaking speeds between 50–400 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types
 - > Clear large lid provides excellent visibility minimizing the need to open the lid
 - > Open lid cut off switch immediately stops shaking when lid is open
 - > Audible and visual alarms alert you to setpoint deviations or end of study
 - > Unique acceleration/deceleration circuit prevents sudden starts and stops protecting your cells
 - > Microprocessor controls precisely regulate temperature, speed and running time

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Excella® E24		
120 V/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1352-0000	\$6,810.00
New Brunswick™ Excella® E24R		
120 V/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1352-0004	9,280.00
Drip pan , for universal platform M1250-9902	M1250-9906	221.00
Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R, 18 x 18 in (45.7 × 45.7 cm), phenolic resin unless otherwise stated		
Universal platform	M1250-9902	855.00
50 mL Erlenmeyer flask dedicated platform	M1194-9903	1,070.00
125 mL Erlenmeyer flask dedicated platform	M1194-9904	910.00
250 mL Erlenmeyer flask dedicated platform	M1194-9905	940.00
500 mL Erlenmeyer flask dedicated platform	M1194-9906	910.00
1 L Erlenmeyer flask dedicated platform	M1194-9907	870.00
2 L Erlenmeyer flask dedicated platform	M1194-9908	870.00
2.8 L Fernbach flask dedicated platform	M1233-9932	895.00
Sticky pad platform, sticky pads sold separately	M1250-9903	610.00
Quick-change platform kit , enables platform attachment without tools	M1192-9901	500.00
Utility carrier , holds racks and vessels between rubber-cushioned cross bars	M1194-9909	765.00
Utility tray , with non-skid rubber surface	M1194-9910	700.00
Rod kit , for utility carrier (one additional rod)	M1194-9923	237.00
Spare parts kit , for E24 and E24R	M1352-6000	146.00

Technical specifications		
Model	New Brunswick™ Excella E24	New Brunswick Excella E24R
External height (with door open)	40 in / 101.6 cm	40 in / 101.6 cm
Timer	0:01–99.59 hrs	0:01–99.59 hrs
Dimensions (W × D × H)	22 × 30 × 24 in / 56 × 76.2 × 61 cm	22 × 30 × 24 in / 56 × 76.2 × 61 cm
Weight w/o accessories	133 lb / 60 kg	175 lb / 80 kg
Temperature range	Ambient + 7°C to 60°C	15°C below ambient to 60°C
Audible and visual alarms	yes	yes
Available program modes	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control
Balanced drive mechanism	Heavy-duty with permanently lubricated ball bearings	Heavy-duty with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	B	B
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)	1.9 cm (3/4 in)
Platform size	18 × 18 in / 46 × 46 cm	18 × 18 in / 46 × 46 cm
Refrigerated	no	yes
Speed range	50–400 rpm	50–400 rpm
Temperature uniformity	± 0.5°C at 37°C	± 0.5°C at 37°C





New Brunswick™ Excella® E25/E25R



- Product features**
- > Heavy-duty counterbalanced drive provides long life, vibration-free, quiet and dependable operation.
 - > Large platform size provides increased flexibility with the number and size of cultures (sold separately)
 - > Large viewing window and internal light – for easy viewing of samples without the need to open the door
 - > Microprocessor controls precisely regulate temperature, speed and running time
 - > Audible and visual alarms alert you to setpoint deviations or end of study
 - > Powerful fan and heater provide rapid heat up and temperature recovery after door opening

Description
The large console Excella E25 incubator shaker and model E25R with added refrigeration accommodate test tubes or flasks up to 6 liters in a tightly-sealed growth chamber featuring a large viewing window for easy viewing of samples. A wide variety of platforms, clamps and test tube racks provide for unlimited flexibility. The Excella models E25 and E25R offer field calibration of temperature and speed through the microprocessor-controlled touch pad.

Technical specifications		
Model	New Brunswick™ Excella E25	New Brunswick Excella E25R
External height (with door open)	65 in / 165.1 cm	65 in / 165.1 cm
Timer	0:01–99.59 hrs	0:01–99.59 hrs
Dimensions (W × D × H)	50 × 30.5 × 41.7 in / 127 × 77 × 105.9 cm	50 × 30.5 × 41.7 in / 127 × 77 × 105.9 cm
Weight w/o accessories	377 lb / 171 kg	421 lb / 191 kg
Temperature range	Ambient + 7°C to 60°C	15°C below ambient to 60°C
Audible and visual alarms	yes	yes
Available program modes	> Constant speed and temperature > Timed shaking > RS-232 control	> Constant speed and temperature > Timed shaking > RS-232 control
Balanced drive mechanism	Heavy-duty with permanently lubricated ball bearings	Heavy-duty with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	F	F
Memory	Non volatile with automatic power failure restart	Non volatile with automatic power failure restart
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	2.5 cm (1 in)	2.5 cm (1 in)
Platform size	30 × 18 in / 76 × 46 cm	30 × 18 in / 76 × 46 cm
Refrigerated	no	yes
Speed range	50–400 rpm	50–400 rpm
Temperature uniformity	± 0.5°C at 37°C	± 0.5°C at 37°C

Product appearance, specifications, and/or prices are subject to change without notice.



Ordering information

Description	Catalog No.	List USD
New Brunswick™ Excella® E25, 120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1353-0000	\$11,800.00
New Brunswick™ Excella® E25R, 120 V/60 Hz, orbit diameter 2.5 cm (1 in)	M1353-0004	14,115.00
Interchangeable platforms for Innova® 2300/43/43R, Excella® E10/E25/E25R, 30 x 18 in (76 x 46 cm), aluminum		
Universal platform	M1250-9920	1,180.00
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,560.00
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,520.00
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,405.00
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,325.00
1 L Erlenmeyer flask dedicated platform	AG-1	1,265.00
2 L Erlenmeyer flask dedicated platform	AG-2	1,180.00
2.8 L Fernbach flask dedicated platform	AG-28	1,265.00
4 L Erlenmeyer flask dedicated platform	AG-4	1,180.00
6 L Erlenmeyer flask dedicated platform	AG-6	1,220.00
Sticky pad platform, sticky pads sold separately	M1250-9904	800.00
Utility tray, with non-skid rubber surface	AG-00	910.00

BioCommand® SFI Automated Data Logging Software



- Product features**
- > Track the operational parameters of your choice with the option to design and save templates
 - > Monitor multiple units from the same PC
 - > Trend and archive critical data including temperature, agitation speed and gas concentration for up to 32 units simultaneously
 - > Provides indications of alarm conditions identified by the product
 - > Ability to email or text message alarm events

Description
The BioCommand SFI software package is designed specifically for standard laboratory equipment including shakers and CO₂ incubators. The software package allows you to track key operational information such as time, temperature, shaking speed, CO₂ concentrations and humidity.

Ordering information

Description	Catalog No.	List USD
BioCommand® SFI Automated Data Logging Software		
Shaker package	M1291-1000	\$1,640.00
Shaker cable, 7.6 m	M1291-8001	198.00
RS-232 to USB converter, 4-port	P0460-7751	555.00
RS-232 to USB converter, 8-port	P0460-7750	905.00



Model	Innova® 2000	Innova® 2050	Innova® 2100
Page	443	444	445
Dimensions (W × D × H)	14 × 14.5 × 5.8 in / 35.5 × 37 × 14.6 cm	17 × 14.5 × 5.8 in / 43 × 37 × 14.6 cm	19 × 21.9 × 6.4 in / 48 × 55.5 × 16.3 cm
Weight w/o accessories	33 lb / 15 kg	35 lb / 16 kg	75 lb / 34 kg
Audible and visual alarms	yes	yes	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
cETLus and CE marked	yes	yes	yes
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B	B	B
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)	1.9 cm (3/4 in)	1.9 cm (3/4 in)
Platform size	13 × 11 in / 33 × 28 cm	16 × 12 in / 41 × 31 cm	18 × 18 in / 46 × 46 cm
Timer	0:01–99.59 hrs	0:01–99.59 hrs	0:01–99.59 hrs



Model	Innova® 2150	Innova® 2300	Innova® 2350	Innova® 5000
Page	446	447	448	Inquire
Dimensions (W × D × H)	24 × 23.3 × 6.4 in / 60.1 × 59.1 × 16.3 cm	30 × 22.3 × 6.4 in / 76.2 × 56.6 × 16.3 cm	36 × 24 × 6.4 in / 91.4 × 61 × 16.3 cm	62 × 38 × 53 in / 157 × 96.5 × 135 cm
Weight w/o accessories	80 lb / 36 kg	105 lb / 48 kg	115 lb / 52 kg	1,410 lb / 640.1 kg
Audible and visual alarms	yes	yes	yes	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings	Triple-eccentric with permanently lubricated ball bearings
cETLus and CE marked	yes	yes	yes	yes
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B	B	B	F
Motor type	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)	2.5/5.1 cm (1/2 in)	2.5/5.1 cm (1/2 in)	5.1 cm (2 in)
Platform size	24 × 18 in / 61 × 46 cm	30 × 18 in / 76 × 46 cm	36 × 24 in / 91 × 61 cm	32 × 27 in / 83 × 68 cm
Timer	0:01–99.59 hrs	0:01–99.59 hrs	0:01–99.59 hrs	0:01–99.59 hrs

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com



Open Air Shakers



1. Speed controlled and displayed in increments of 1 rpm
2. Includes audible and visual alarms, timer (0:01–99.59 hrs) with continuous operation or automatic shut-off at the end of the study
3. Enclosed electronics and mechanical components prevent internal damage from accidental spills
4. Versatile accessory platform (sold separately) accommodates flasks up to 500 mL

Description

For shaking in ambient conditions: on the bench or in a warm or cold room, the Innova Platform Shakers are the instrument of choice. Dependable operation is due in large part to the Eppendorf triple-eccentric counterbalanced drive. Eppendorf offers a broad-based cast-iron support mechanism properly sized to each shaker and specifically designed to support high-speed applications and heavy workloads. The Innova Open Air platform shakers are offered in 6 different sizes offering reliable, continuous shaking of test tubes and flasks up to 6 liters.

- Product features**
- > Triple-eccentric counterbalanced drive in cast iron housing provides vibration and trouble free operation for years
 - > Quiet operation provides a favorable work environment
 - > Shaking speeds between 25–500 rpm for 2.5 cm (1 in) orbits and 25–300 rpm for 5.1 cm (2 in) orbits provides versatility for culturing a wide range of cell types
 - > Speed controlled and displayed in increments of 1 rpm
 - > Includes audible and visual alarms, timer (0–99.9 h) with continuous operation or automatic shut-off at the end of the study

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



New Brunswick™ Innova® 2000



Technical specifications	
Model	Innova® 2000
Timer	0:01–99.59 hrs
Dimensions (W × D × H)	14 × 14.5 × 5.8 in / 35.5 × 37 × 14.6 cm
Weight w/o accessories	33 lb / 15 kg
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B
Motor type	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)
Platform size	13 × 11 in / 33 × 28 cm
Speed range ¹⁾	25 – 500 rpm
Speed control	±1 rpm

¹⁾ Baffled flasks will reduce maximum speed.

Ordering information		
Description	Catalog No.	List USD
New Brunswick™ Innova® 2000, platform sold separately, 120 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1190-0000	\$2,810.00
Interchangeable platforms for Innova® 2000, 33 × 28 cm, stainless steel		
Universal platform	M1001-0240	460.00
10 mL Erlenmeyer flask dedicated platform	AG2-10	550.00
25 mL Erlenmeyer flask dedicated platform	M1190-9919	495.00
50 mL Erlenmeyer flask dedicated platform	M1190-9915	465.00
125 mL Erlenmeyer flask dedicated platform	M1190-9916	465.00
250 mL Erlenmeyer flask dedicated platform	M1190-9917	495.00
500 mL Erlenmeyer flask dedicated platform	M1190-9918	495.00
Utility carrier, holds glassware between rubber-cushioned cross bars	AG2-UT	665.00
Utility tray, with non-skid rubber surface	AG2-00	500.00
Rod kit, for utility carrier (one additional rod)	M1001-9920	204.00
Capacity upgrade kit, to convert a Model 2000 to a Model 2050	M1190-9910	535.00
Temperature and speed monitoring kit, for recording on an external chart recorder	M1190-9909	1,130.00



New Brunswick™ Innova® 2050



Technical specifications	
Model	Innova® 2050
Timer	0:01–99.59 hrs
Dimensions (W × D × H)	17 × 14.5 × 5.8 in / 43 × 37 × 14.6 cm
Weight w/o accessories	35 lb / 16 kg
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B
Motor type	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)
Platform size	16 × 12 in / 41 × 31 cm
Speed range ¹⁾	25 – 500 rpm
Speed control	±1 rpm

¹⁾ Baffled flasks will reduce maximum speed.

Ordering information

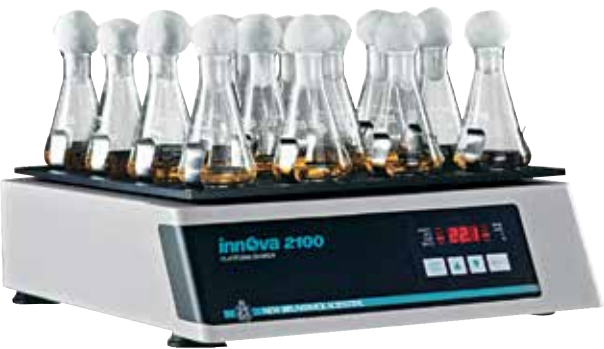
Description	Catalog No.	List USD
New Brunswick™ Innova® 2050, platform sold separately, 120 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1190-0010	\$2,995.00
Interchangeable platforms for Innova® 2050, 40.6 × 30.5 cm, stainless steel		
Universal platform	M1190-9900	575.00
10 mL Erlenmeyer flask dedicated platform	M1190-9901	945.00
25 mL Erlenmeyer flask dedicated platform	M1190-9902	750.00
50 mL Erlenmeyer flask dedicated platform	M1190-9903	725.00
125 mL Erlenmeyer flask dedicated platform	M1190-9904	750.00
250 mL Erlenmeyer flask dedicated platform	M1190-9905	675.00
500 mL Erlenmeyer flask dedicated platform	M1190-9906	590.00
1 L Erlenmeyer flask dedicated platform	M1190-9911	575.00
Utility carrier, holds glassware between rubber-cushioned cross bars	M1190-9907	695.00
Utility tray, with non-skid rubber surface	M1190-9908	615.00
Rod kit, for utility carrier (one additional rod)	M1190-9920	200.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



New Brunswick™ Innova® 2100



Technical specifications	
Model	Innova® 2100
Timer	0:01–99.59 hrs
Dimensions (W × D × H)	19 × 21.9 × 6.4 in / 48 × 55.5 × 16.3 cm
Weight w/o accessories	75 lb / 34 kg
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B
Motor type	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)
Platform size	18 × 18 in / 46 × 46 cm
Speed range ¹⁾	25 – 500 rpm
Speed control	±1 rpm

¹⁾ Baffled flasks will reduce maximum speed.

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 2100, platform sold separately, 120 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1194-0000	\$4,145.00
Drip pan, for universal platform M1250-9902	M1250-9906	221.00
Interchangeable platforms for Innova® 2100/40/40R/42/42R, Excella® E5/E24/E24R, 45.7 × 45.7 cm, phenolic resin unless otherwise stated		
Universal platform	M1250-9902	855.00
50 mL Erlenmeyer flask dedicated platform	M1194-9903	1,070.00
125 mL Erlenmeyer flask dedicated platform	M1194-9904	910.00
250 mL Erlenmeyer flask dedicated platform	M1194-9905	940.00
500 mL Erlenmeyer flask dedicated platform	M1194-9906	910.00
1 L Erlenmeyer flask dedicated platform	M1194-9907	870.00
2 L Erlenmeyer flask dedicated platform	M1194-9908	870.00
2.8 L Fernbach flask dedicated platform	M1233-9932	895.00
Sticky pad platform, sticky pads sold separately	M1250-9903	610.00
Quick-change platform kit, enables platform attachment without tools	M1192-9901	500.00
Utility carrier, holds racks and vessels between rubber-cushioned cross bars	M1194-9909	765.00
Utility tray, with non-skid rubber surface	M1194-9910	700.00
Rod kit, for utility carrier (one additional rod)	M1194-9923	237.00
Capacity upgrade kit, to convert a Model 2100 to a Model 2150	M1194-9926	535.00
Temperature and speed monitoring kit, for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	1,170.00



New Brunswick™ Innova® 2150



Technical specifications	
Model	Innova® 2150
Timer	0:01–99.59 hrs
Dimensions (W × D × H)	24 × 23.3 × 6.4 in / 60.1 × 59.1 × 16.3 cm
Weight w/o accessories	80 lb / 36 kg
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B
Motor type	Solid state, DC brushless motor
Orbit	1.9 cm (3/4 in)
Platform size	24 × 18 in / 61 × 46 cm
Speed range ¹⁾	25 – 500 rpm
Speed control	±1 rpm

¹⁾ Baffled flasks will reduce maximum speed.

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 2150, platform sold separately, 120 V/50/60 Hz, orbit diameter 1.9 cm (3/4 in)	M1194-0010	\$4,510.00
Interchangeable platform for Innova® 2150, 61 × 45.7 cm, phenolic resin		
Universal platform	M1194-9912	910.00
50 mL Erlenmeyer flask dedicated platform	M1194-9915	1,345.00
125 mL Erlenmeyer flask dedicated platform	M1194-9916	1,160.00
250 mL Erlenmeyer flask dedicated platform	M1194-9917	1,190.00
500 mL Erlenmeyer flask dedicated platform	M1194-9918	1,160.00
1 L Erlenmeyer flask dedicated platform	M1194-9919	1,050.00
2 L Erlenmeyer flask dedicated platform	M1194-9920	870.00
Utility carrier, holds glassware between rubber-cushioned cross bars	M1194-9921	870.00
Utility tray, with non-skid rubber surface	M1194-9922	810.00
Rod kit, for utility carrier (one additional rod)	M1194-9925	238.00
Quick-change platform kit, enables platform attachment without tools	M1194-9927	495.00
Temperature and speed monitoring kit, for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	1,170.00

i For more information go to www.eppendorf.com



New Brunswick™ Innova® 2300



Technical specifications	
Model	Innova® 2300
Timer	0:01–99.59 hrs
Dimensions (W × D × H)	30 × 22.3 × 6.4 in / 76.2 × 56.6 × 16.3 cm
Weight w/o accessories	105 lb / 48 kg
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B
Motor type	Solid state, DC brushless motor
Orbit	2.5/5.1 cm (1/2 in)
Platform size	30 × 18 in / 76 × 46 cm
Speed range ¹⁾	25 – 500 rpm
Speed control	±1 rpm

¹⁾ Baffled flasks will reduce maximum speed.

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 2300, platform sold separately		
120 V/50/60 Hz, orbit diameter 2.5 cm (1 in)	M1191-0000	\$6,870.00
120 V/50/60 Hz, orbit diameter 5.1 cm (2 in)	M1191-0020	7,250.00
Drip pan, to catch accidental spills, for use with universal platform M1250-9920	M1250-9921	277.00
Interchangeable platforms for Innova® 2300/43/43R, Excella® E10/E25/E25R, 76 × 46 cm, aluminum		
Universal platform	M1250-9920	1,180.00
50 mL Erlenmeyer flask dedicated platform	M1191-9908	1,560.00
125 mL Erlenmeyer flask dedicated platform	M1191-9909	1,520.00
250 mL Erlenmeyer flask dedicated platform	M1191-9910	1,405.00
500 mL Erlenmeyer flask dedicated platform	M1191-9911	1,325.00
1 L Erlenmeyer flask dedicated platform	AG-1	1,265.00
2 L Erlenmeyer flask dedicated platform	AG-2	1,180.00
2.8 L Fernbach flask dedicated platform	AG-28	1,265.00
4 L Erlenmeyer flask dedicated platform	AG-4	1,180.00
6 L Erlenmeyer flask dedicated platform	AG-6	1,220.00
Sticky pad platform, sticky pads sold separately	M1250-9904	800.00
Utility tray, with non-skid rubber surface	AG-00	910.00
Quick-change platform kit, enables platform attachment without tools	M1191-9904	525.00
Capacity upgrade kit, to convert a Model 2300 to a Model 2350	M1191-9905	550.00
Temperature and speed monitoring kit, for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	1,170.00



New Brunswick™ Innova® 2350



Technical specifications	
Model	Innova® 2350
Timer	0:01–99.59 hrs
Dimensions (W × D × H)	36 × 24 × 6.4 in / 91.4 × 61 × 16.3 cm
Weight w/o accessories	115 lb / 52 kg
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric with permanently lubricated ball bearings
Benchtop (B), Under Bench (U), Floor (F) or Stackable (S)	B
Motor type	Solid state, DC brushless motor
Orbit	2.5/5.1 cm (1/2 in)
Platform size	36 × 24 in / 91 × 61 cm
Speed range ¹⁾	25 – 500 rpm
Speed control	±1 rpm

¹⁾ Baffled flasks will reduce maximum speed.

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 2350 , platform sold separately		
120 V/50/60 Hz, orbit diameter 2.5 cm (1 in)	M1191-0010	\$7,485.00
120 V/50/60 Hz, orbit diameter 5.1 cm (2 in)	M1191-0030	7,845.00
Interchangeable platform for Innova® 2350 , 91.4 x 61 cm, marine plywood unless otherwise noted		
Universal platform	PTL-386	1,180.00
Universal platform, aluminum	PTL-393	730.00
125 mL Erlenmeyer flask dedicated platform	M1191-9912	1,980.00
250 mL Erlenmeyer flask dedicated platform	M1191-9913	1,940.00
500 mL Erlenmeyer flask dedicated platform	M1191-9914	1,725.00
Utility tray , with non-skid rubber surface	AG-21-00	1,060.00
Temperature and speed monitoring kit , for recording on an external chart recorder for Innova® 2100/2150/2300/2350	M1194-9924	1,170.00

New Brunswick™ Innova® 5050/5051 Racking Systems



- Product features**
- > Includes electrical strip to power multiple shakers
 - > Maximum speed 400 rpms for 2.5 cm (1 in) orbits and 300 rpm for 5.1 cm (2 in) orbits
 - > Larger flasks can be accommodated by removing adjustable-height shelves
 - > Comes preassembled

Description

Save space and stack Innova 2300 open air shakers. Model 5050 consists of a sturdy, stainless-steel rack to hold up to 4 Innova 2300 shakers. Innova 5051 rack extension can be added to support an additional 4 shakers, bringing the total number to 8 Innova 2300 shakers.

Ordering information

Description	Catalog No.	List USD
New Brunswick™ Innova® 5050 Rack System , 120 V/50/60 Hz	M1232-0100	\$6,235.00
New Brunswick™ Innova® 5051 Rack Extension , 120 V/50/60 Hz	M1232-0110	4,020.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Clamps and Accessories for Universal Platforms



Dedicated platforms come with clamps of one size pre-installed.



Flask clamp, of one-piece stainless steel, fitted with springs for stability at elevated speeds. Includes mounting screws.



Microplate Racks and Carriers mount to any universal platform and are used to secure microplates and allow for their shaking. Each rack secures the plates in place and can either be ordered for stacking the plates or laying plates flat in a single layer.



Test tube racks, small, medium and large.



Utility carries secure vessels between adjustable, cushioned rods.



Universal platform shown with accessory clamps, test tube racks and sticky tape.



Utility trays provide a non-slip surface for low-speed applications.



Sticky Pad (shown) and sticky tape replace clamps for speeds up to 250 rpm. Sticky Pad requires an anodized aluminum surface. (Not for use in water bath shakers)

Accessories		
Description	Catalog No.	List USD
Test tube rack, medium		
diameter 8–11 mm	M1289-0010	\$335.00
diameter 12–15 mm	M1289-0020	335.00
diameter 15–18 mm	M1289-0030	335.00
diameter 18–21 mm	M1289-0040	335.00
diameter 22–26 mm	M1289-0050	335.00
diameter 26–30 mm	M1289-0060	335.00
Test tube rack, small		
diameter 8–11 mm	M1289-0001	335.00
diameter 12–15 mm	M1289-0002	335.00
diameter 15–18 mm	M1289-0003	335.00
diameter 18–21 mm	M1289-0004	335.00
diameter 22–26 mm	M1289-0005	335.00
diameter 26–30 mm	M1289-0006	335.00
Test tube rack, large		
diameter 8–11 mm	M1289-0100	335.00
diameter 12–15 mm	M1289-0200	335.00
diameter 15–18 mm	M1289-0300	335.00
diameter 18–21 mm	M1289-0400	335.00
diameter 22–26 mm	M1289-0500	335.00
diameter 26–30 mm	M1289-0600	335.00
Clamp, for 1 L media bottles	ACSB-1000S	102.00
Clamp, for 500 mL media bottles	ACSB-500S	102.00
Angled Test Tube Rack Holder, for user-supplied test tube racks and microplates	TTR-210	340.00
Spacer Bar for TTR-210	TTR-215	106.00
Microplate rack, for single layer of five plates	TTR-221	340.00
Microplate rack, stack three deepwell or nine standard plates	M1289-0700	335.00
Sticky Pad Adapter Kit	M1250-9504	195.00
Sticky Tape, 500 × 4.1 cm (16.4 feet × 1.6 in) roll	M1250-9600	289.00
Sticky Pad, 20 × 20 cm (8 × 8 in)	M1250-9700	81.50
Drip pan, for universal platform M1250-9902	M1250-9906	221.00
Drip pan, to catch accidental spills, for use with universal platform M1250-9920	M1250-9921	277.00

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Universal Platforms and Clamps for Incubated Shakers

Universal Platforms and Clamps for Incubated Shakers					
	Innova® 40/40R	New Brunswick™ S41i	Innova® 42/42R	Innova® 43/43R	Innova® 44/44R
	M1250-9902	M1334-9920	M1250-9902	M1250-9920	M1282-9904
10 mL Erlenmeyer flasks	109	–	109	183	187
25 mL Erlenmeyer flasks	64	–	64	92	93
50 mL Erlenmeyer flasks	45	–	45	92	91
125 mL Erlenmeyer flasks	21	20	21	39	39
250 mL Erlenmeyer flasks	18	16	18	30	30
500 mL Erlenmeyer flasks	14	12	14	18	24
1 L Erlenmeyer flasks	8	10	8	12	14
2 L Erlenmeyer flasks	5	4	5	8	8
2 L Lauber Thompson	5	4	5	8	8
2.8 L Fernbach flasks	4	3	4	6	6
3 L Erlenmeyer flasks	4	3	4	6	6
4 L Erlenmeyer flasks	–	3	4	6	6
5 L Erlenmeyer flasks	–	–	4	6	6
6 L Erlenmeyer flasks	–	–	2	4	–
Microplate rack	8	–	8	16	16
Microplate rack	5	–	2	4	4
Test tube rack, small	5	–	5	9	9
Test tube rack, medium	5	–	5	9	9
Test tube rack, large	4	–	4	7	7
Platform size	18 x 18 in / 46 x 46 cm	14 x 24 in / 36 x 61 cm	18 x 18 in / 46 x 46 cm	30 x 18 in / 76 x 46 cm	30 x 18 in / 76 x 46 cm

Dedicated Platforms and Clamps for Incubated Shakers								
	Innova® 40/40R		New Brunswick™ S41i		Innova® 42/42R		Innova® 43/43R	
	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.
50 mL Erlenmeyer flasks	64	M1194-9903			64	M1194-9903	108	M1191-9908
125 mL Erlenmeyer flasks	32	M1194-9904	32	M1334-9921	32	M1194-9904	60	M1191-9909
250 mL Erlenmeyer flasks	24	M1194-9905	24	M1334-9922	24	M1194-9905	40	M1191-9910
500 mL Erlenmeyer flasks	15	M1194-9906	15	M1334-9923	15	M1194-9906	24	M1191-9911
1 L Erlenmeyer flasks	11	M1194-9907	11	M1334-9924	11	M1194-9907	15	AG-1
2 L Erlenmeyer flasks	6	M1194-9908	6	M1334-9925	6	M1194-9908	12	AG-2
2.8 L Fernbach flasks	4	M1233-9932	3	M1334-9926	4	M1233-9932	6	AG-28
4 L Erlenmeyer flasks		–	3	M1334-9927	4	M1233-9930	6	AG-4
6 L Erlenmeyer flasks		–		–		–	4	AG-6
Sticky platform		M1250-9903				M1250-9903		M1250-9904
Platform size	18 x 18 in / 46 x 46 cm		14 x 24 in / 36 x 61 cm		18 x 18 in / 46 x 46 cm		30 x 18 in / 76 x 46 cm	

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



I26/I26R	Excella® E24/E24R	Excella® E25/E25R	Clamp	Clamp	
M1324-9904	M1250-9902	M1250-9920	Catalog No.	Dimensions (W x H)	List USD
187	109	183	ACE-10S	31 x 26 mm	\$ 19.00
93	64	92	M1190-9004	38 x 21 mm	20.00
93	45	92	M1190-9000	51 x 26 mm	21.50
39	21	39	M1190-9001	66 x 36 mm	22.50
30	18	30	M1190-9002	79 x 48 mm	33.00
24	14	18	M1190-9003	100 x 52 mm	38.00
12	8	12	ACE-1000S	120 x 63 mm	48.50
8	5	8	ACE-2000S	152 x 71 mm	71.50
8	5	8	M1190-9005	168 x 112 mm	94.50
6	4	6	ACFE-2800S	198 x 66 mm	96.50
6	4	6	ACE-3000S	189 x 128 mm	84.00
–	–	6	ACE-4000S	196 x 95 mm	83.00
–	–	6	ACE-5000S	222 x 145 mm	93.50
–	–	4	ACE-6000S	225 x 96 mm	104.00
16	8	16	M1289-0700		335.00
4	5	4	TTR-221		340.00
9	5	9	see page 451		
9	5	9	see page 451		
7	4	7	see page 451		
30 x 18 in / 76 x 46 cm	18 x 18 in / 46 x 46 cm	30 x 18 in / 76 x 46 cm			

Innova® 44/44R		I26/I26R		Excella® E24/E24R		Excella® E25/E25R	
Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.
–		–		64	M1194-9903	108	M1191-9908
60	M1282-9905	60	M1282-9905	32	M1194-9904	60	M1191-9909
40	M1282-9906	40	M1324-9906	24	M1194-9905	40	M1191-9910
24	M1282-9907	24	M1324-9907	15	M1194-9906	24	M1191-9911
15	M1282-9908	15	M1324-9908	11	M1194-9907	15	AG-1
12	M1282-9909	12	M1324-9909	6	M1194-9908	12	AG-2
6	M1282-9910	6	M1324-9910	4	M1233-9932	6	AG-28
6	M1282-9911	–		–		6	AG-4
–		–		–		4	AG-6
	M1282-9913		M1324-9911		M1250-9903		M1250-9904
30 x 18 in / 76 x 46 cm		30 x 18 in / 76 x 46 cm		18 x 18 in / 46 x 46 cm		30 x 18 in / 76 x 46 cm	



Universal Platforms and Clamps for Innova® Open Air Shakers

Universal Platforms and Clamps for Innova® Open Air Shakers				
	Innova® 3100	Innova® 2000	Innova® 2050	Innova® 2100
	M1231-9930	M1001-0240	M1190-9900	M1250-9902
10 mL Erlenmeyer flasks	59	60	86	109
25 mL Erlenmeyer flasks	35	20	32	64
50 mL Erlenmeyer flasks	18	15	32	45
125 mL Erlenmeyer flasks	18	11	16	21
250 mL Erlenmeyer flasks	8	6	10	18
500 mL Erlenmeyer flasks	6	4	8	14
1 L Erlenmeyer flasks	4	–	–	8
2 L Erlenmeyer flasks	2	–	–	5
2 L Lauber Thompson	–	–	–	4
2.8 L Fernbach flasks	–	–	–	4
3 L Erlenmeyer flasks	–	–	–	4
4 L Erlenmeyer flasks	–	–	–	4
5 L Erlenmeyer flasks	–	–	–	4
6 L Erlenmeyer flasks	–	–	–	2
Microplate rack	–	3	8	8
Microplate rack	–	–	2	2
Test tube rack, small	–	3	5	5
Test tube rack, medium	–	–	5	5
Test tube rack, large	–	–	4	4
Platform size	12 x 16.5 in / 31 x 42 cm	13 x 11 in / 33 x 28 cm	16 x 12 in / 41 x 31 cm	18 x 18 in / 46 x 46 cm

Dedicated Platforms and Clamps for Innova Open Air Shakers								
	Innova® 3100		Innova® 3100 (half platform)		Innova® 2000		Innova® 2050	
	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.
10 mL Erlenmeyer flasks	–		–		60	AG2-10	86	M1190-9901
25 mL Erlenmeyer flasks	–		–		32	M1190-9919	48	M1190-9902
50 mL Erlenmeyer flasks	31	M1231-9933	13	AG7-50	20	M1190-9915	35	M1190-9903
125 mL Erlenmeyer flasks	22	M1231-9934	8	AG7-125	12	M1190-9916	20	M1190-9904
250 mL Erlenmeyer flasks	13	M1231-9935	5	AG7-250	8	M1190-9917	12	M1190-9905
500 mL Erlenmeyer flasks	8	M1231-9936	–		6	M1190-9918	8	M1190-9906
1 L Erlenmeyer flasks	6	M1231-9937	–		–		6	M1190-9911
2 L Erlenmeyer flasks	2	M1231-9938	–		–		–	
2.8 L Fernbach flasks	–		–		–		–	
4 L Erlenmeyer flasks	–		–		–		–	
6 L Erlenmeyer flasks	–		–		–		–	
Sticky platform	–		–		M1190-0300		–	
Platform size	12 x 16.5 in / 31 x 42 cm		–		13 x 11 in / 33 x 28 cm		16 x 12 in / 41 x 31 cm	

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Innova® 2150	Innova® 2300	Innova® 2350	Innova® 5000	Clamp	Clamp	
M1194-9912	M1250-9920	PTL-386	M1196-9447	Catalog No.	Dimensions (W x H)	List USD
–	183	–	264	ACE-10S	31 x 26 mm	\$ 19.00
–	92	–	143	M1190-9004	38 x 21 mm	20.00
63	92	–	143	M1190-9000	51 x 26 mm	21.50
35	39	75	72	M1190-9001	66 x 36 mm	22.50
24	30	50	42	M1190-9002	79 x 48 mm	33.00
20	18	30	33	M1190-9003	100 x 52 mm	38.00
12	12	24	17	ACE-1000S	120 x 63 mm	48.50
6	8	15	12	ACE-2000S	152 x 71 mm	71.50
5	6	12	8	M1190-9005	168 x 112 mm	94.50
5	6	12	–	ACFE-2800S	198 x 66 mm	96.50
5	6	10	8	ACE-3000S	189 x 128 mm	84.00
5	6	10	8	ACE-4000S	196 x 95 mm	83.00
4	6	8	6	ACE-5000S	222 x 145 mm	93.50
3	4	–	6	ACE-6000S	225 x 96 mm	104.00
16	16	16	16	M1289-0700		335.00
4	4	4	4	TTR-221		340.00
9	9	9	9	see page 451		
9	9	9	9	see page 451		
7	7	7	7	see page 451		
24 x 18 in / 61 x 46 cm	30 x 18 in / 76 x 46 cm	36 x 24 in / 91 x 61 cm	32 x 27 in / 83 x 68 cm			

Innova® 2100		Innova® 2150		Innova® 2300		Innova® 2350		Innova® 5000	
Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.	Clamps	Catalog No.
–		–		–		–		–	
–		–		–		–		–	
64	M1194-9903	80	M1194-9915	108	M1191-9908	–		–	
32	M1194-9904	48	M1194-9916	60	M1191-9909	96	M1191-9912	99	M1196-9900
24	M1194-9905	35	M1194-9917	40	M1191-9910	70	M1191-9913	64	M1196-9901
15	M1194-9906	20	M1194-9918	24	M1191-9911	40	M1191-9914	42	M1196-9902
11	M1194-9907	12	M1194-9919	15	AG-1	–		23	M1196-9903
6	M1194-9908	8	M1194-9920	12	AG-2	–		14	M1196-9904
	M1233-9932	–		6	AG-28	–		9	M1196-9905
–		–		6	AG-4	–		9	M1196-9906
–		–		4	AG-6	–		8	M1196-9907
	M1250-9903	–			M1250-9904	–		–	
18 x 18 in / 46 x 46 cm		24 x 18 in / 61 x 46 cm		30 x 18 in / 76 x 46 cm		36 x 24 in / 91 x 61 cm		32 x 27 in / 83 x 68 cm	



New Brunswick™ Innova® 3100 water bath shaker



Technical specifications	
Timer	0.1–99.9 hrs, continuous
Dimensions (W × D × H)	17 × 27.5 × 14.5 in / 43 × 70 × 37 cm
Weight w/o accessories	105 lb / 47.6 kg
Temperature range	Ambient + 5°C to 80°C
Audible and visual alarms	yes
Balanced drive mechanism	Triple-eccentric
Benchtop (B), Under Bench (U), Floor Stand (F) or Stackable (S)	B
Memory	Non volatile with automatic power failure restart
Motor type	DC brushless
Orbit	1.3 cm (1/2 in)
Platform size	12 × 16.5 in / 31 × 42 cm
Speed range	25–400
Temperature uniformity	± 0.25°C (37°C)

Description
The Innova 3100 Water Bath Shaker provides precise temperature control. This automated water bath shaker is ideal for culturing a wide range of cell types at temperatures up to 80°C. Dependable operation is due in large part to the New Brunswick triple-eccentric counterbalanced drive. Larger-capacity than many water bath shakers, the Innova 3100 easily accommodates tubes and flasks up to 2 Liters. A temperature range of 5°C above ambient to 80°C provides for a wide range of laboratory work, using molecular and cell biology protocols. Elevated temperatures are attained with the aid of an optional gable cover and with a bath liquid with a high boiling point to minimize evaporation.

- Product features**
- > Large-capacity orbital shakers with microprocessor control of speed and temperature
 - > One-piece seamless bath of heavy gauge stainless steel with rounded corners for ease of cleaning
 - > Full and half-size accessory platforms are available
 - > Optional cooling assembly for below ambient operation
 - > Adjustable water-level control automatically replenishes evaporated water. Has drain, water-in and overflow lines
 - > Shaking speeds between 25–400 rpm (± 1 rpm) provides versatility for culturing a wide range of cell types.
 - > Temperature precisely controlled within ± 0.1°C in 30–40°C range
 - > Triple-eccentric counterbalanced drive in cast iron housing with 9 permanently lubricated ball bearings
 - > Easy-to-use membrane keypad with LED display
 - > Acceleration circuit builds up speed slowly avoiding sudden stop/starts and unwanted splashing

Ordering information		
Description	Catalog No.	List USD
New Brunswick Innova 3100 water bath shaker, 120 V/60 Hz, orbit diameter 1.3 cm (1/2 in)	M1231-0000	\$8,380.00

i For more information go to www.eppendorf.com



Biological Shaker Service Products

Unmatched Service and Support
Service for peace of mind and increased product longevity for your Eppendorf biological shakers. We have developed service programs and options tailored to your needs in order to ensure your system is operating consistently at peak performance. Eppendorf shakers are to provide the highest standards of quality and reliability and our service offerings are no different. Now you can further extend that value and the life of your instrument through Eppendorf support services.

Extended Warranty
Your New Brunswick Innova®, I Series or Excella® shakers comes with a multiple year warranty (model line dependent) which covers all parts, labor and travel for Field Serviced systems, should the system ever need repair. When you purchase your shaker, or prior to the end of the original warranty period, you may also purchase additional years of warranty coverage. Smaller systems are returned to our Service Center for repair or an upgrade to Field Service is available with travel charges. Extended Warranty does not include a Preventive Maintenance which can be arranged separately or as part of Advantage and Premium Service options.

Extended Warranty	Catalog No.	List USD
Open air shakers	901513560	\$1,350.00
Incubated shakers	901513562	2,500.00
Incubated shakers with refrigeration	901513564	2,750.00
Industrial shakers (Innova 5000)	901513566	2,900.00

Labor Only Warranty (Innova Only)
1-year additional LABOR ONLY coverage for Innova® shakers. Provides a full, initial 3-year parts and 3-year labor warranty on new instruments (must be purchased at the same time as the shaker).

Labor Only Warranty	Catalog No.	List USD
Innova shakers	LABOR1-SHKR	\$418.00

Advantage OS Service
An easy-to-use value packaged service option to help plan in advance and protect your system. Advantage Service provides labor and travel for 2 visits; a scheduled preventive maintenance (PM) and an unscheduled single repair visit in the future. You may use both visits for repair needs if you prefer, but only 1 of the visits may be a PM. Advantage Service does not include, but provides a discount on parts for the PM and repair service. If both visits are utilized before the year term of this agreement, you have the option to renew early or to maintain a parts and labor discount for additional service.

Advantage OS Service	Catalog No.	List USD
Flat Fee, In house repair for open air shakers	901513568	\$1,000.00
Incubated shakers	901513570	1,900.00
Incubated shakers with refrigeration	901513572	2,300.00
Industrial shakers (Innova 5000)	901513574	2,650.00

Check out more of our service offerings on the following pages for additional information on performance plans for your Eppendorf shaker!



Biological Shaker Performance Plans

Biological Shaker Performance Plans

Biological shakers are essential to cell culture applications and are required to be in continuous use for years. Relatively small, short-term variations in shaker operation can significantly influence culturing outcomes, with negative effects on yields and/or cell expression. Eppendorf’s Biological Shaker Performance Plans ensure consistent, reliable shaker performance to manufacturer specifications after years of wear and tear. Biological Shaker Performance Plans include a choice of preventive maintenance protocols which are designed to check and validate stable shaker performance.

These protocols review all control parameters of your shaker and ensure everything is working as good as new. Installation Qualification (IQ) and Operational Qualification (OQ) certification services ensure your Quality Management requirements are fulfilled, providing you with qualified assurance that your biological shaker is functioning correctly, in accordance with manufacturer specifications. **Care for your shaker — optimize your cultures!**

Performance Plans	ESSENTIAL CHECK
Catalog No. for shakers with heating/cooling	0082080003
Catalog No. for open air shakers	0082080013
Catalog No. for shakers with heating	0082080023
Catalog No. for industrial shakers	0082080033
External Checks and Maintenance	
Check installation environment	■
Check electrical/gas ¹⁾ supply and fittings	
Check condition/operation of any door/ lid open sensors	
Check security of doors/lids, handles, door struts ¹⁾ and hinges	
Internal Equipment and Fittings	
Check security of shaker mechanism; lubricate non-sealed bearings, as appropriate ¹⁾	
Check shaker drive motor	
Check condition of shaker drive belt; adjust belt tension as necessary	
Clean and check condenser ¹⁾	
Validation and Metrology	
Validation and adjustment of operating parameters to within Eppendorf specifications	■
Documentation	
Issue preventive maintenance Check List (signed document)	■
Dated service sticker fixed to shaker to confirm Eppendorf service	■
Provide IQ Report and Certificate	
Provide OQ Report and Certificate	
Supporting Information	
Contract period	
Number of routine preventive service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
Order number for combined Installation and Operational Qualification (IQ/OQ) services: > for open shaker: 0082080019 > for shaker with heating: 0082080029 > for shaker with heating/cooling: 0082080009 > for industrial shaker: 0082080039 > Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.	

¹⁾ Where feature is present. ²⁾ The detailed certification service contents are listed in the OQ report.



epServices
for premium performance



Service features

- > Eppendorf quality standards
- > Eppendorf original spare parts

Long-term benefits

- > Improves reliability and consistency
- > Long lifetime of instruments

For more information go to www.eppendorf.com/epServices. In selected countries only.

ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082080004	0082080005	0082080007	0082080008
0082080014	0082080015	0082080017	0082080018
0082080024	0082080025	0082080027	0082080028
0082080034	0082080035	0082080037	0082080038
■	■	■	■
■	■	■	■
■	■	■	■
■	■	■	■
■	■		
■	■		
■	■		
■	■		
■	■		■ ²⁾
■	■		
■	■	■	■
■	■	■	
			■
	one year	n/a	n/a
one	one	n/a	n/a
not included	parts, labor, and travel time included	n/a	n/a



S41i Incubator Shaker Performance Plans

S41i Incubator Shaker Performance Plans

The unique versatility of the New Brunswick S41i Incubator Shaker supports simultaneous culture of adherent and suspension cultures. Even the smallest deviations in the culturing environment can result in undesirable outcomes due to the importance of consistency and reproducibility in cell culture applications. To ensure reproducible results and to protect your precious cultures from undesirable variables, we offer a range of maintenance services.

For your Quality Management requirements we also offer certification services that include Installation Qualification (IQ) and Operational Qualification (OQ) certification to provide optimal instrument performance and stability and accuracy of culturing parameters. With our Performance Plans options we ensure that your New Brunswick S41i Incubator Shaker instruments are in good working condition, according to manufacturer’s specifications.
Optimized service — optimized yield — reliable results!

Performance Plans	ESSENTIAL CHECK
Catalog No.	0082050003
External Checks and Maintenance	
Check installation environment	■
Check electrical/gas supply and fittings	
Replace in-line CO ₂ filter and auto-zero filter	
Internal Equipment and Fittings	
Check security of shaker platform(s) and flask holders	
Check security of incubator shelf/shelves and racking system	
Replace platform support post boot seals	
Check condition of humidity trays	
Check condition of shaker drive belt	
Check condition of chamber CO ₂ and temperature sensors	■
Validation and Metrology	
Validation and adjustment of operating parameters to within Eppendorf specifications	■
Documentation	
Issue preventive maintenance Check List (signed document)	■
Dated service sticker fixed to S41i Incubator Shaker to confirm Eppendorf service	■
Provide IQ Report and Certificate	
Provide OQ Report and Certificate	
Supporting Information	
Contract period	
Number of routine preventive service visits included	one
Cost of repairs/parts replacement outside scope of preventive maintenance visit (where Eppendorf product warranty has expired)	not included
Order number for combined Installation and Operational Qualification (IQ/OQ) services: 0082050009.	
Additionally, if you require a Customized Service we will be very pleased to discuss your requirements.	

¹⁾ Where feature is present. ²⁾ The detailed certification service contents are listed in the OQ report.



Service features

- > Eppendorf customer care and quality commitment
- > Genuine quality-inspected Eppendorf parts
- > Certified service reports and advisory service labels

Long-term benefits

- > Reliable system performance and culturing results over the entire system lifetime
- > GLP compliant documentation
- > Optimized service
- > Optimized yield
- > Reliable Results

ADVANCED MAINTENANCE	PREMIUM SERVICE	Installation Qualification (IQ)	Operational Qualification (OQ)
0082050004	0082050005	0082050007	0082050008
■	■	■	■
■	■	■	■
■	■		
■	■		■
■	■		■
■	■		
■	■		
■	■		
■	■		■
■	■		■ ²⁾
■	■		
■	■	■	■
■	■	■	
			■
	one year	n/a	n/a
one	one	n/a	n/a
not included	parts, labor, and travel time included	n/a	n/a



Bioprocessing is at the heart of many industries and Eppendorf has the right solutions for all of them.

Bioprocessing

Perfect Mix

Joint expertise for excellent solutions

Already well established as a global leader for liquid-, cell- and sample- handling products, Eppendorf entered the bioprocess market in 2007 through the acquisition of New Brunswick™ Scientific. This strategic move not only added 70 years of New Brunswick experience with autoclavable and sterilizable-in-place fermentors and bioreactors, it also allowed Eppendorf to add an array of lab products such as shakers, freezers, and incubators to its already comprehensive portfolio of products. In 2012, Eppendorf further expanded its bioprocess expertise and product offerings by acquiring DASGIP®,

a pioneer in the development and production of benchtop and small scale parallel bioreactors, and information technology (IT) systems. Ideally-suited for high throughput and process development work, the DASGIP portfolio further expanded the Eppendorf bioprocess portfolio.

With a comprehensive offering of single-use and traditional products for the growth of mammalian, microbial, insect, plant and algae cells, and working volumes of 60 mL – 2,400 L, the Eppendorf bioprocess portfolio can satisfy the demands of process development through production.



Scalable systems

- > Eppendorf bioprocess systems cover a wide range of working volumes for applications from research through production



Single-use options

- > Innovative single-use bioreactors feature traditional stirred tank design



Software solutions

- > Comprehensive software packages offer innovative solutions for advanced process control and information management

A New Scale of Bioprocessing

Solutions that grow with you.

From the parallel mini bioreactor system for early stage bioprocess development, the benchtop and parallel bioreactor systems for the laboratory scale to the sterilize-in-place solutions for production: Eppendorf offers users from industry and research extensive bioprocess solutions from a single source and meets the highest quality demands.

Mini bioreactor systems



60 – 250 mL

Parallel benchtop systems



0.2 – 2 L



0.7 – 3.8 L

Benchtop bioreactors and fermentors



0.4 – 10 L



1.3 – 40 L

SIP bioreactors and fermentors



5.5 – 2,400 L

Small scale

Bench scale

Pilot scale/Production scale



Model	DASbox® Mini Bioreactor System	Small Scale Parallel Bioreactor Systems	Bench Scale Parallel Bioreactor Systems
Page	470	470	471
Working volume range ¹⁾	60 – 250 mL	0.2–2 L	0.7 – 3.8 L
Single-use vessels available	■	■	■
Glass vessels, autoclavable	■	■	■
Stainless-steel vessels, SIP			
Interchangeable vessels	■	■	■
Bacteria/yeasts/fungi	■	■	■
Plant cells/algae	■	■	■
Mammalian/animal cells	■	■	■
Stem cells	■	■	■
Insect cells	■	■	■
Number of parallel units	Up to 24	Up to 16	Up to 16
Controller ²⁾	DWC	DWC	DWC
Touchscreen controller			
BioCommand®			
DASware®	■	■	■
Gas mixing options	4 gas (air, N ₂ , O ₂ , CO ₂)	4 gas (air, N ₂ , O ₂ , CO ₂)	4 gas (air, N ₂ , O ₂ , CO ₂)
Gas flow control ³⁾	TMFC	R or TMFC	R or TMFC
Exhaust analysis	■	■	■
Optical density measurement	■	■	■
Validation			

1) Realized using multiple vessel sizes 2) Controllers: DWC = DASware control, RPC = Reactor Process Controller,BCS = BioFlo Control Software, PLC = Programmable Logic Controller
3) Gas Flow Controllers: R = Rotameter, TMFC = Thermal Mass Flow Controller 4) Rotameter is for overlay only



BioFlo®/CelliGen 115	BioFlo 320	CelliGen® BLU
472	473	472
0.4 – 10.5 L	0.25–40 L	1.3 – 40 L
■	■	■
■	■	
■	■	■
■	■	
■	■	
■	■	■
■	■	■
■	■	■
up to 3	up to 8	
RPC	BCS	RPC
■	■	■
■	■	■
■	■	■
4 gas (air, N ₂ , O ₂ , CO ₂)	4 gas (air, N ₂ , O ₂ , CO ₂)	4 gas (air, N ₂ , O ₂ , CO ₂)
R or TMFC	TMFC	R ⁴ or TMFC
■	■	■
■	■	
	■	■



Model	BioFlo 415	BioFlo 510	CelliGen 510
Page	473	474	474
Working volume ranges ¹⁾	2.0–15.5 L	5.5–32 L	0.4 – 10.5 L
Single-use vessels available			
Glass vessels, autoclavable			
Stainless-steel vessels, SIP	■	■	■
Interchangeable vessels	■		
Bacteria/yeasts/fungi	■	■	
Plant cells/algae	■	■	■
Mammalian/animal cells			■
Stem cells			■
Insect cells			■
Number of parallel units			
Controller ²⁾	RPC	RPC/PLC	RPC/PLC
Touchscreen controller	■	■	■
BioCommand®	■	■	■
DASware®	■		
Gas mixing options	4-gas (air, N ₂ , O ₂ , CO ₂)	4-gas (air, N ₂ , O ₂ , CO ₂)	4-gas (air, N ₂ , O ₂ , CO ₂)
Gas flow control ³⁾	R or TMFC	R or TMFC	R or TMFC
Exhaust analysis	■	■	■
Optical density measurement			
Validation	■	■	■

1) Realized using multiple vessel sizes 2) Controllers: DWC = DASware control, RPC = Reactor Process Controller,BCS = BioFlo Control Software, PLC = Programmable Logic Controller
3) Gas Flow Controllers: R = Rotameter, TMFC = Thermal Mass Flow Controller 4) Rotameter is for overlay only



Model	BioFlo 610	BioFlo Pro	CelliGen Pro
Page	474	475	475
Working volume ranges ¹⁾	13 – 100 L	32 – 2,400 L	18.8 – 520 L
Single-use vessels available			
Glass vessels, autoclavable			
Stainless-steel vessels, SIP	■	■	■
Interchangeable vessels			
Bacteria/yeasts/fungi	■	■	
Plant cells/algae	■	■	■
Mammalian/animal cells			■
Stem cells			■
Insect cells	■		■
Number of parallel units			
Controller ²⁾	RPC	PLC	PLC
Touchscreen controller	■	■	■
BioCommand®	■	■	■
DASware®			
Gas mixing options	2-gas (air, O ₂)	2-gas (air, O ₂)	4-gas (air, N ₂ , O ₂ , CO ₂)
Gas flow control ³⁾	R or TMFC	R or TMFC	R or TMFC
Exhaust analysis	■	■	■
Optical density measurement			
Validation	■	■	■

Parallel Bioprocessing for Unparalleled Results

DASGIP® Bioreactor Systems



DASbox Parallel mini bioreactor system 60 - 250 mL working volume



DASGIP Parallel Bioreactor Systems for small-scale applications 0.2 - 2 L working volume

Product features

- > 4-fold parallel system extendable to up to 24 parallel operated glass or single-use bioreactors
- > Suitable for cell culture and microbial fermentation
- > Compact mini bioreactor system: requires only 7 cm (3 inches) bench space per bioreactor
- > Optimal tool for DoE and scale down approaches
- > Agitation control supporting overhead-driven Rushton, marine-type or pitched blade impellers
- > Innovative liquid-free temperature control system needs no coolant agent supply and supports independent temperature control for each bioreactor
- > Accurate monitoring and control of pH, DO and level
- > Variable speed pumps for accurate liquid addition and operation in batch, fed-batch, continuous and cyclic perfusion mode
- > 4 mass flow controllers per bioreactor allow for individual mixing of air, N₂, O₂ and CO₂ to headspace and/or submerged
- > Novel liquid-free Peltier exhaust condenser with easy to handle slide in - slide out activation and deactivation
- > DASware control Software for advanced process control
- > Compatible with DASware Software Suite for interconnectivity and bioprocess information management

Product features

- > Parallel operation of up to 16 glass or single-use bioreactors
- > DASGIP Bioblock for advanced and user-friendly temperature control
- > Suitable for cell culture, microbial fermentation and phototrophic cultivation
- > Modular design of control units allows for flexible system configurations that meet the demands of specific applications
- > Control of agitation, pH, level and DO (including customizable cascade modes) in each bioreactor
- > Variable speed pumps for accurate liquid addition and operation in batch, fed-batch, continuous and cyclic perfusion mode
- > Optical absorbance measurement for online calculation of e.g. OD₆₀₀ or cell dry weight
- > TMFC individual gas mixing of air, N₂, O₂ and CO₂
- > Online calculation of OTR, CTR and RQ
- > DASware control Software for advanced process control
- > Compatible with DASware Software Suite for interconnectivity and bioprocess information management

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



DASGIP Parallel Bioreactor Systems for bench-scale applications 0.7 - 3.8 L working volume

Product features

- > Parallel operation of up to 16 glass or single-use bioreactors
- > Suitable for cell culture, microbial fermentation and phototrophic cultivation
- > Modular design of control units for flexible system configurations that meet the demands of specific applications
- > Temperature control via heat blankets and cooling fingers
- > Control of agitation, pH, level and DO (including customizable cascade modes) in each bioreactor
- > Variable speed pumps for accurate liquid addition and operation in batch, fed-batch, continuous and cyclic perfusion mode
- > Optical absorbance measurement for online calculation of e.g. OD₆₀₀ or cell dry weight
- > TMFC individual gas mixing of air, N₂, O₂ and CO₂
- > Online calculation of OTR, CTR and RQ
- > DASware control Software for advanced process control
- > Compatible with DASware Software Suite for interconnectivity and bioprocess information management



Choice of impellers

DASGIP PBR4 for phototrophic cultivation



DASGIP Peltier Exhaust Condensors for selected glass and single-use vessels



DASGIP Compression Fittings for headplate ports



Exceedingly Versatile – Bench Scale Fermentors and Bioreactors



New Brunswick CelliGen BLU
Bench-scale single-use bioreactor
1.3 - 40 L working volume

Product features

- > Designed for high-density cell culture in research or production applications
- > Rigid-walled, single-use stirred-tank vessel for proven performance and scalability
- > Eliminates vessel autoclaving and cleaning
- > All vessel components in product contact are made of USP Class VI materials and tested for leachables and extractables
- > Packed-bed vessel: first single-use vessel to feature proprietary New Brunswick Fibra-Cel® and packed bed impeller
- > Features intuitive New Brunswick RPC control software and touchscreen interface
- > Non-invasive pH and DO technology
- > Validation packages available
- > Seven additional analog input/output connections for local integration of ancillary equipment
- > Compatible with DASware Software Suite or BioCommand for bioprocess information management



New Brunswick BioFlo/CelliGen 115
Bench-scale fermentor/bioreactor
0.4 - 10.5 L working volume

Product features

- > Precise temperature control provided through heat blanketed vessel (shown above) or water jacketed vessel
- > Compatible BioBLU single-use vessels
- > Pre-programmed with both fermentation and cell culture operating modes for flexibility
- > Ability to control up to three independent reactors from a single easy-to-use touchscreen
- > Features intuitive New Brunswick RPC control software and touchscreen interface
- > Eight interchangeable glass vessel options
- > Customizable gas flow and mixing options
- > Available in pre-defined packages for easy ordering, or fully configurable systems to meet specific needs
- > Compatible with DASware Software Suite or BioCommand for bioprocess information management



BioFlo 320
Bench-scale fermentor and bioreactor
0.6 - 10.5 L working volume (autoclavable)
0.25 - 40 L working volume (single-use)

Product features

- > Interchangeable autoclavable and BioBLU Single-Use Vessels
- > Integrated Mettler Toledo® Intelligent Sensor Management (ISM) platform
- > Control up to eight systems from a single-user interface
- > Universal control for both microbial and cell culture applications
- > Field-upgradable TMFC drawers for sparge and overlay gas
- > Enhanced software package with new cascade and time profile features
- > Built-in optical pH sensing technology for use with the BioBLU Single-Use Vessels
- > Ethernet communication for multi-unit control, Eppendorf SCADA software, and IP addressing
- > Up to six integrated pumps capable of operating in variable speed mode
- > Eight independently controlled process gas supplies
- > Suitable for batch, fed batch, and continuous processes
- > Validation packages available for GMP regulated processes
- > Compatible with DASware Software Suite or BioCommand for bioprocess information management



New Brunswick BioFlo 415
Bench-scale fermentor
2.0 - 15.5 L working volume

Product features

- > Automated SIP process utilizes only a water supply and the system's built-in electric heat blanket for sterilization - no external steam supply needed
- > Eliminates the need for transferring vessels to the autoclave for sterilization
- > Features intuitive New Brunswick RPC control software and touchscreen interface
- > Fully customizable trend screen for data logging
- > User-definable cascades for localized process control
- > Validation packages available
- > 7 additional analog input/output connections for local integration of ancillary equipment
- > ASME-rated pressure vessel
- > Compatible with DASware Software Suite or BioCommand for bioprocess information management



Industry Standards meet Flexibility - Sterilizable-in-Place Fermentors and Bioreactors



New Brunswick BioFlo 510 & CelliGen 510
Bench- and pilot-scale SIP fermentor and bioreactor
5.5 - 32 L working volume

Product features

- > SIP bench and pilot scale reactors designed to meet the needs of R&D through production
- > Modular design allows for complete system flexibility
- > Add or remove components pre- or post-delivery
- > Multiple impeller and gas flow options
- > Features intuitive New Brunswick RPC control software and touchscreen interface
- > Optional Allen Bradley® PLC
- > Integrated load cell for online vessel volume monitoring
- > Fully automated SIP sequence for sterilization
- > Validation packages available
- > 7 additional analog input/output connections for local integration of ancillary equipment
- > ASME-rated pressure vessel



New Brunswick BioFlo 610
Pilot-scale SIP fermentor
13 - 100 L working volume

Product features

- > Integrated mobile skid simplifies transport
- > Pilot production system without the traditional cost or footprint
- > Modular design allows for complete system flexibility
- > Features intuitive New Brunswick RPC control software and touchscreen interface
- > Fully integrated load cell for online vessel volume monitoring
- > Validation packages available
- > 7 additional analog input/output connections for local integration of ancillary equipment
- > ASME-rated pressure vessel



New Brunswick BioFlo Pro & CelliGen Pro
Large-scale SIP fermentor and bioreactor
BioFlo Pro: 32 - 2,400 L working volume
CelliGen Pro: 18.8 - 520 L working volume

Product features

- > Large scale industrial system with full adherence to cGMP and GAMP® guidelines
- > Modular design with over a hundred options allows for high level of customization pre and post delivery
- > Multiple validation package offerings
- > Open piping skid allows for easy accessibility
- > NEMA-4 (IP65) rated control cabinet with industry standard Allen Bradley PLC
- > Flush mounted vessel ports for enhanced vessel design and drainability
- > Multiple impeller and gas flow options
- > Optional validation packages available
- > ASME-rated pressure vessel



Eppendorf offers a diverse range of specialized impellers for bioreactors including:

1. Spin Filter (shown with marine blade impeller)
 2. Cell-Lift Impeller
 3. Packed-Bed Basket Impeller with draft tube for use with Fibra-Cel® disks (complete impeller assembly shown below)
 4. Pitched Blade Impeller
 5. Marine Blade Impeller
- Rushton and Rushton-type Impellers (not shown)



Impellers and Fibra-Cel disk options enhance growth and productivity

Fibra-Cel disks are a solid support material used with New Brunswick packed-bed bioreactors for growth of adherent mammalian, animal and insect cells, when secreted proteins are desired. Key advantages:

- > Cell densities averaging 10 times higher than traditional microcarriers, due to protection from shear forces
- > Higher mass transfer of nutrients and oxygen
- > Low pressure drop across the bed for efficient scale-up
- > Higher surface-to-volume ratios



BioBLU® Single-Use Vessels – Dependability through Proven Design



From 65 mL to 40 L, working volume, Eppendorf has a single-use solution to meet your needs

Single-use simplicity

With renowned polymer expertise, Eppendorf is proud to offer the largest portfolio of rigid walled stirred-tank single-use vessels – in small and bench scale, to be operated with parallel DASbox Mini Bioreactor System, DASGIP Parallel Bioreactor Systems or New Brunswick bench scale systems. Kits are also available for third-party bioprocess systems. They are easy to install and compatible with popular Applikon® and Sartorius® autoclavable bioprocessing systems.

Product features

- > Proven performance and scalability of stirred-tank design
- > User-friendly set-up for rapid turnaround, shorter development times and lower operating costs
- > Specifically adapted designs available for microbial applications
- > Packed-bed configuration with Fibra-Cel disks is ideal for perfusion/continuous processes
- > USP Class VI and animal component-free materials, making vessels appropriate for GMP production
- > Non-invasive or industry standard sensor technology

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.



Single-use for DASbox. Choice of BioBLU 0.3 mini vessels for cell culture and microbial applications. With small working volumes from 65 to 250 mL perfectly suited for DoE approaches.



Single-use for DASGIP Bioblock. Choice of BioBLU 1 vessels for cell culture and microbial application, designed for truly parallel bioprocessing. Working volume range from 0.25 to 1.25 L.



Single-use for Eppendorf and third party bioreactor controller. BioBLU 5c, BioBLU 14c and BioBLU 50c for best scalability in cell culture. Working volume range from 1.3 to 40 L.



Single-use for DASGIP Parallel Bioreactor Systems. Parallel processing with BioBLU 5c and BioBLU 14c vessels for best scalability with processes developed in DASbox or DASGIP Bioblock.



BioBLU 5p vessel for adherent cells and perfusion processes. Packed-bed vessels utilizing the proprietary Eppendorf packed bed impeller design with pre-loaded Fibra-Cel disks.



BioBLU 0.3f and BioBLU 1f vessels fully address the specific needs of fermentation, including mass and heat transfer. Working volume range of 65 mL to 1.25 L.

Eppendorf Bioprocess Software – Much More Than Just Bioprocess Control



Eppendorf bioprocess software solutions - advanced monitoring and control through comprehensive information management

Eppendorf offers BioCommand and DASware control Supervisory Control and Data Acquisition (SCADA) software packages for advanced bioprocess control. Next-generation bioprocess management is provided by the comprehensive DASware software suite.

- BioCommand software**
Enhances your ability to monitor, control and log data from your fermentation and cell culture processes through your personal computer. Three distinct packages provide the tools needed for research, optimization, and if needed, the security and audit trails to meet your regulatory requirements.
- > **Track and Trend:** Provides the ability to trend and control parameter setpoints, establish alarm settings, and produce batch records; and is ideal for basic process management
 - > **Batch Control:** Additional enhanced control features including a sophisticated programming module, custom synoptic display window, and equipment lock-out feature
 - > **Batch Control Plus:** Includes three levels of security, event logs, and audit-trail capabilities to be compatible with the FDA 21 CFR Part 11

Features	Track & Trend	Batch Control	Batch Control Plus	DASware control
Batch info	■	■	■	■
User-defined event log	■	■	■	■
Summary	■	■	■	■
Loop info	■	■	■	■
Alarms	■	■	■	■
Trend graphs	■	■	■	■
Data log	■	■	■	■
Reports	■	■	■	■
Graphical programming		■	■	
Script programming		■	■	■
Synoptic display		■	■	■
Equipment lock-out		■	■	■
Audit trail/security			■	■
21 CFR Part 11			■	■ ¹⁾
OPC compliance	■	■	■	■
Parallel calibration				■
DASware compatibility				■

¹⁾ 21 CFR Part 11 compatibility is available for DASware control as an optional package. Please contact us for further information.

i For more information go to www.eppendorf.com

Product appearance, specifications, and/or prices are subject to change without notice.

DASware control software
Is at the core of all DASbox and DASGIP systems and was designed for parallel cultivation with individual control of each bioreactor. Parallel calibration and cleaning procedures are supported as well as integrated batch functionality for process and recipe management. It features easy one-click start, configurable online charts, trending, logging rates and online configurable control parameters and profiles. Full controller scripting eases scale-up and scale-down. Automated data export, reporting and chart creation with Microsoft® Excel® add-in as well as professional database with managed access (Microsoft® SQL Server®) support advanced reporting and data processing. DASware analyze and DASware connect enable OPC client/server functionality.



DASware software suite
Next-generation bioprocess management
A suite of smart and flexible software solutions to accelerate bioprocess development. It enables interconnectivity of bioreactors with external lab-devices, comprehensive data- and information management, Design of Experiments (DoE) and remote control of bioprocesses. DASware can be used with any Eppendorf benchtop bioreactor solution as well as third-party bioreactor controllers.



DASware access
> Remote monitoring and control of bioprocesses via PC, Notebook and Netbook or with the DASGIP iApp via iPhone®, iPod touch® and iPad®



DASware analyze
> Seamless integration of external lab devices to the bioreactor allows for process automation and feedback control loops



DASware connect
> Integration into process control systems and legacy corporate historians facilitating company-wide access to all relevant bioprocess data



DASware design
> Applies the Design of Experiments (DoE) concept via a full factorial DoE builder or by importing DoE designs from third-party DoE tools



DASware discover
> A comprehensive and user-friendly information management solution for bioprocessing



DASware migrate
> Integration of various bioreactor control units and systems - this software is the gateway to comprehensive functionality of DASware on third-party bioreactor controllers



Service for Eppendorf Bioprocess Equipment

Premium Service

Provides peace of mind full service including all parts, labor and travel used in maintaining the product. A Preventive Maintenance and an annual software maintenance plan are also included. Parts such as probes, filters and glassware are not covered, however a 20% discount does apply to these items when replaced at the time of service.

Premium Service	Catalog No.
New Brunswick Product Line	
BLU	PRESERV-BLU
115 add-a-vessel	PRESERV-115AAV
310	PREMSERV-310
310 add-a-vessel	PRESERV-310AAV
320	PREMSERV-320
320 add-a-vessel	PREMSERV-320AAV
415	PRESERV-415
510	PRESERV-510
610	PRESERV-610
Pro 75-150	PRESERV-PRO150
Pro 300-500	PRESERV-PRO500
Pro 1000-1500	PRESERV-PRO1500
Pro -3000	PRESERV-PRO3000
CEPA LE Continuous Flow Centrifuge	PREMSERV-CEPA-LE
CEPA Z41	PREMSERV-CEPA-Z41
CEPA Z61	PREMSERV-CEPA-Z61
CEPA 81	PREMSERV-CEPA-Z81
CEPA Z101G	PREM-CEPA-Z101G
DASGIP Product Line*	
DASGIP or DASbox 4 Vessel System	DASPREMSA-04
DASGIP or DASbox 4 Vessel System w/GA4**	DASPREMSA-GA-04
DASGIP or DASbox 8 Vessel System	DASPREMSA-08
DASGIP or DASbox 8 Vessel System w/GA4**	DASPREMSA-GA-08
DASGIP or DASbox 12 Vessel System	DASPREMSA-12
DASGIP or DASbox 12 Vessel System w/GA4**	DASPREMSA-GA-12
DASbox 16 Vessel System	DASPREMSA-16
DASbox 16 Vessel System w/GA4**	DASPREMSA-GA-16
DASbox 20 Vessel System	DASPREMSA-20
DASbox 20 Vessel System w/GA4**	DASPREMSA-GA-20
DASbox 24 Vessel System	DASPREMSA-24
DASbox 24 Vessel System w/GA4**	DASPREMSA-GA-24

* Includes Software Maintenance Plan.
** Includes parts for the refurbishment of sensors trains for the GA4 module.

Advantage (OS) On-Site Service

This value added service provides an annual Preventive Maintenance and the labor, travel and 20% discount on maintenance parts, including bearing house rebuilds and sensor train refurbishment (if applicable). Should there be a need for one additional repair visit over the course of a year the customer may opt to use both visits for repairs and may renew the agreement early if both visits are utilized prior to the 1 year term.

Advantage (OS) On-Site Service	Catalog No.
New Brunswick Product Line	
BLU	ADSERV-BLU
115	ADSERV-115
115 add-a-vessel	ADSERV-115AAV
310	ADSERV-310
310 add-a-vessel	ADSERV-310AAV
320	ADSERV-320
320 add-a-vessel	ADSERV-320AAV
415	ADSERV-415
510	ADSERV-510
610	ADSERV-610
Pro 75-150	ADSERV-PRO150
Pro 300-500	ADSERV-PRO500
Pro 1000-1500	ADSERV-PRO1500
Pro -3000	ADSERV-PRO3000
CEPA LE Continuous Flow Centrifuge	ADSERV-LE
CEPA Z41	ADSERV-Z41
CEPA Z61	ADSERV-Z61
CEPA 81	ADSERV-Z81
CEPA Z101G	ADSERV-Z101
DASGIP Product Line	
DASGIP or DASbox 4 Vessel System	DASADVSA-04
DASGIP or DASbox 4 Vessel System w/GA4***	DASADVSA-GA-04
DASGIP or DASbox 8 Vessel System	DASADVSA-08
DASGIP or DASbox 8 Vessel System w/GA4***	DASADVSA-GA-08
DASGIP or DASbox 12 Vessel System	DASADVSA-12
DASGIP or DASbox 12 Vessel System w/GA4***	DASADVSA-12
DASGIP or DASbox 12 Vessel System	DASADVMSA-GA-12
DASbox 16 Vessel System	DASADVMSA-16
DASbox 16 Vessel System w/GA4***	DASADVMSA-GA-16
DASbox 20 Vessel System	DASADVMSA-20
DASbox 20 Vessel System w/GA4***	DASADVMSA-GA-20
DASbox 24 Vessel System	DASADVMSA-24
DASbox 24 Vessel System w/GA4***	DASADVMSA-GA-24

*** 20% discount includes the parts used for the refurbishment of sensor trains on the GA4 module.



Annual Preventive Maintenance (PM)

To ensure the performance of your Eppendorf Bioprocess system an annual Preventive Maintenance (PM) is highly recommended. This is a travel and labor agreement to perform a PM on-site in your facility. The system will be inspected, tested and/or adjusted according to specific protocols. All results will be documented and available for review in an electronic maintenance report. Additional parts required beyond the included PM parts kit to restore system performance, additional customer installed items, and calibrations are not included. System areas with O-rings, gaskets, and diaphragms may be inspected. After inspection, these components may be compromised and will be replaced with new elements.

Annual Preventive Maintenance	Catalog No.
New Brunswick Product Line	
BF/CG 115 controller	PM-115
Single BF/CG 115 vessel	PM-115AAV
CelliGen BLU controller	PM-BLU
BF/CG 310 controller	PM-310
Single 310 vessel	PM-310AAV
BF 320 controller	PM-320
Single 320 vessel	PM-320AAV
BioFlo 415 controller and vessel	PM-415
BF/CG 510 RPC/AB	PM-510
BioFlo 610 mobile fermentor	PM-610
BF/CG PRO 75-150	PM-PRO150
BF/CG PRO 300-500	PM-PRO500
BF/CG PRO 1000-1500	PM-PRO-1500
BF/CG PRO 3000	PM-PRO-3000
DASGIP Product Line	
DASGIP 4 Vessel System	DASPM-04
DASGIP 8 Vessel System	DASPM-08
DASGIP 12 Vessel System	DASPM-12
DASbox 16 Vessel System	DASPM-16
DASbox 20 Vessel System	DASPM-20
DASbox 24 Vessel System	DASPM-24

Annual Software Maintenance Plan

Updates and patches officially released during term of plan in electronic format with detailed installation instructions (new/modified manuals as PDF files, if applicable); plus special offers for new software options and custom developments.

Annual Software Maintenance	Catalog No.
All Systems	78000328

Description	Catalog No.
GA4 Sensor Train Refurbishment	
GA4 Refurbishment of Sensor Trains	77105002
IQ/OQ	
New Brunswick Product Line	
BioFlo 320 Control Station IQ Documentation	M1379-0040
BioFlo 320 Control Station OQ Documentation	M1379-0044
DASGIP Product Line	
IQ/OQ Protocol for DASGIP System HQ	761QOQ

OEM/Customized Solutions



The brand Eppendorf stands for highest quality, decades of experience, extensive know-how and reliability.

Customers trust our expertise in developing and manufacturing high-tech laboratory products when it comes to meeting the highest standard demands of individual market segments. Eppendorf continuously develops their existing product range in cooperation with its customers to meet their unique and specific applications and needs.

EPPENDORF'S OEM PORTFOLIO

- > Customized Consumables 484-485
- > Customized Instruments 486-487
- > Customized Logistics and Packaging (for further information please visit www.eppendorf.com/OEM)

Your Global Supplier for Products and Solutions

Description

Customized Solutions products are Eppendorf products that have been tailored to the individual requirements of major customers.

The Customized Eppendorf Automation Tips can be found offering solutions to requirements , such as:

- > Conductive
- > Non-conductive
- > Special tray colors
- > Dimensions
- > Materials
- > Packaging
- > Alternative labeling

For increased convenience printing your company name and identification of products on plates can be easily carried out.

Our OEM portfolio offers further options such as:
Special purity degree: “customized clean”.

The flexibility of Eppendorf OEM/Customized Solutions options are designed to fit your highest demands.
Examples of customized items:

- > Modified bags
- > Modified boxes
- > Customized designs or logos



OEM Products

- > Innovative Technology
- > Cutting-Edge Development
- > Highest Quality Standard
- > Eppendorf manufactured

i For more information go to www.eppendorf.com/OEM

OEM-components/products are sold exclusively to companies who sell these goods on to third parties in conjunction with their own products or as a component of their kits.
Technical specifications subject to change.



Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com

Customized Liquid Handling Robots and Cyclers

Description

A selection of Eppendorf instruments for OEM opportunities is the epMotion, Eppendorf’s own developed and manufactured Liquid Handling Workstation.

The range of Eppendorf automated workstations provide wide range of accessories and large variety of consumables such as: plates, tubes and tip products.

The open OEM platform offers many liquid handling applications by:

- > Flexibility of positions
- > Technology of magnetic separation
- > GxP software



i For more information go to www.eppendorf.com/OEM

OEM-components/products are sold exclusively to companies who sell these goods on to third parties in conjunction with their own products or as a component of their kits. Technical specifications subject to change.



We offer OEM PCR cyclers for any application including diagnostic use:

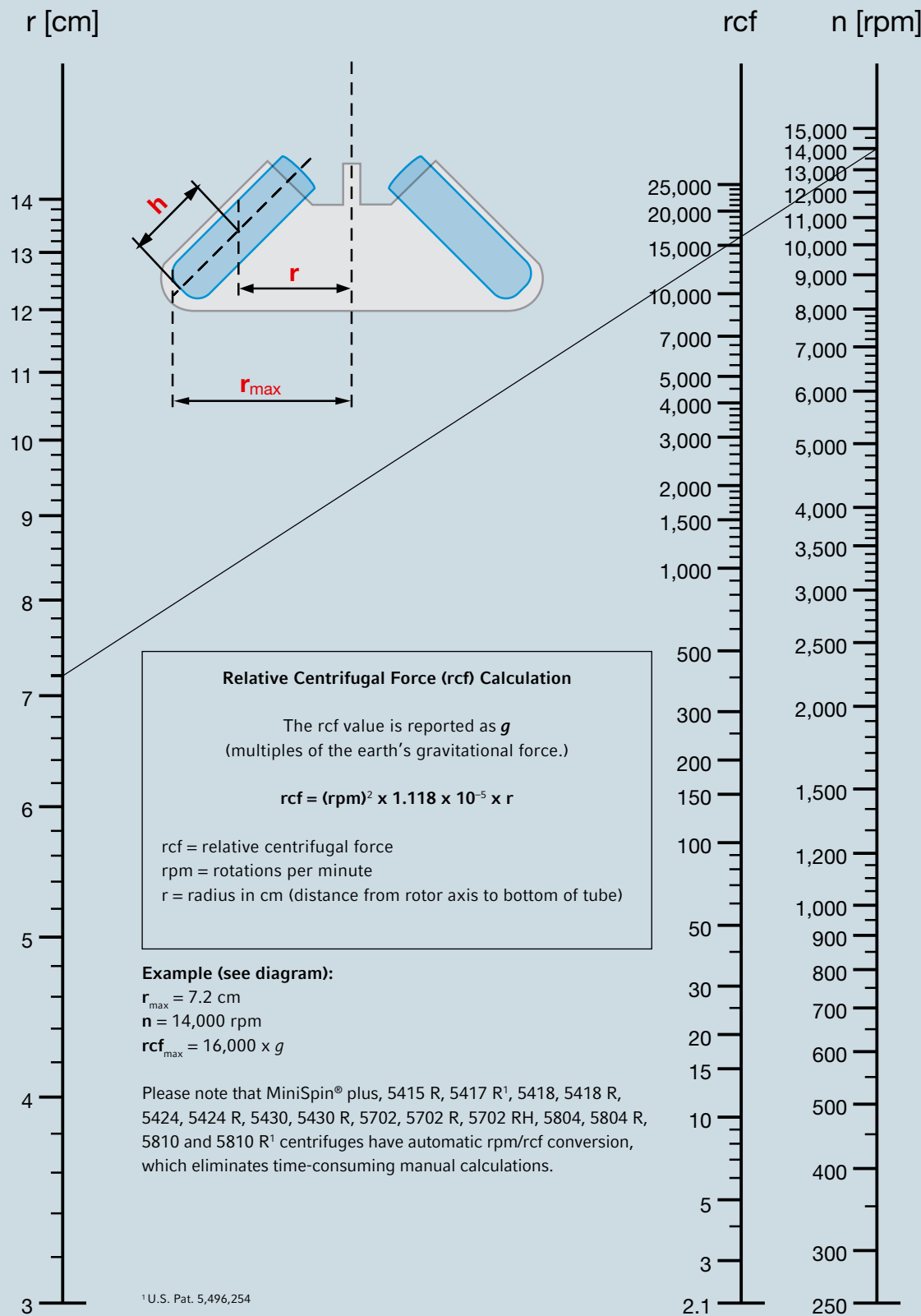
- > Silver or aluminum block
- > With or without gradient function
- > Flexlid for a wide spectrum of consumables

Customization according to your needs is our business!



Eppendorf North America: 800-645-3050
Email: info@eppendorf.com · www.eppendorf.com

Application Tips for Centrifugation



Application Tips for Centrifugation

k-factors and centrifugation times

The k-factor, a value that is primarily determined by the rotor, affects the sedimentation time necessary during centrifugation. It is a measure for the sedimentation distance in the test tube, i.e., for the difference between the longest and shortest distance between the sample and the rotor axis (see diagram). The duration of separation in the test tube increases in direct proportion to its distance. The k-factor clearly depends on the angle of the tubes in the rotor and on the type of tubes used. A small k-factor means more rapid separation. The k-factor is also affected by the rotational speed; the higher the rotational speed, the quicker the separation.

In the case of Models 5430 and 5418: a centrifugation time of only 7 minutes is required in the 5430 to attain the same separation performance for the selected separation example; in contrast, the 5418 requires 10 minutes.

Separation example:

$$t_{5417 \text{ C}} = t_{5415 \text{ C}} \times \left(\frac{k_{5417 \text{ C}}}{k_{5415 \text{ C}}} \right)$$
$$t_{5417 \text{ C}} = 10 \text{ min} \times \left(\frac{377}{525} \right)$$
$$t_{5417 \text{ C}} = 7.18 \text{ min} = 7'11''$$

When determining centrifugation times, it is therefore advisable to take into consideration the physical characteristics of the centrifuge used, particularly when using critical samples and small sample quantities.

The formula is

$$k = \frac{\ln \left(\frac{r_{max}}{r_{min}} \right)}{n^2} \times 2.533 \times 10^{11}$$

n = rotational speed; r_{min} and r_{max} : see diagram

A direct comparison of two rotors is possible by calculating the relative speed of a separation in both centrifuge rotors.

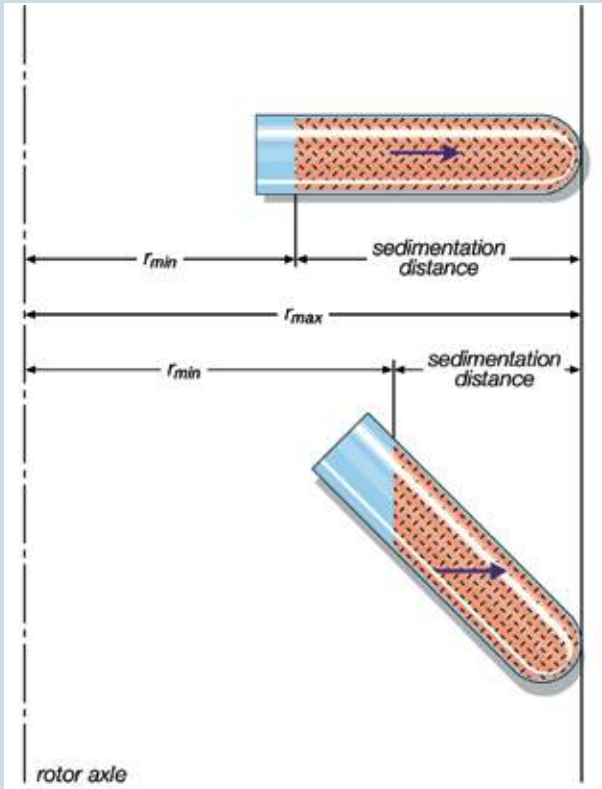
The formula for calculating the relative centrifugation time is

$$t_x = t \times \left(\frac{k_x}{k} \right)$$

t = Centrifugation time in the comparative centrifuge, calculated from experiment
 t_x = Centrifugation time required in centrifuge X
k = k-factor of the comparative centrifuge
 k_x = k-factor of centrifuge X

Example:

The 30-position fixed-angle rotor in Centrifuges 5430 has a k-factor of 508 at a maximum speed of 14,000 rpm and a maximum rcf of 20,817 x *g*. With the same rotor angle (45°) and the same maximum speed (14,000 rpm), the 18-position fixed-angle rotor of Centrifuge 5415 C attains a maximum rcf of 16,873 x *g* and a k-factor of 719.



Microcentrifuge Tubes

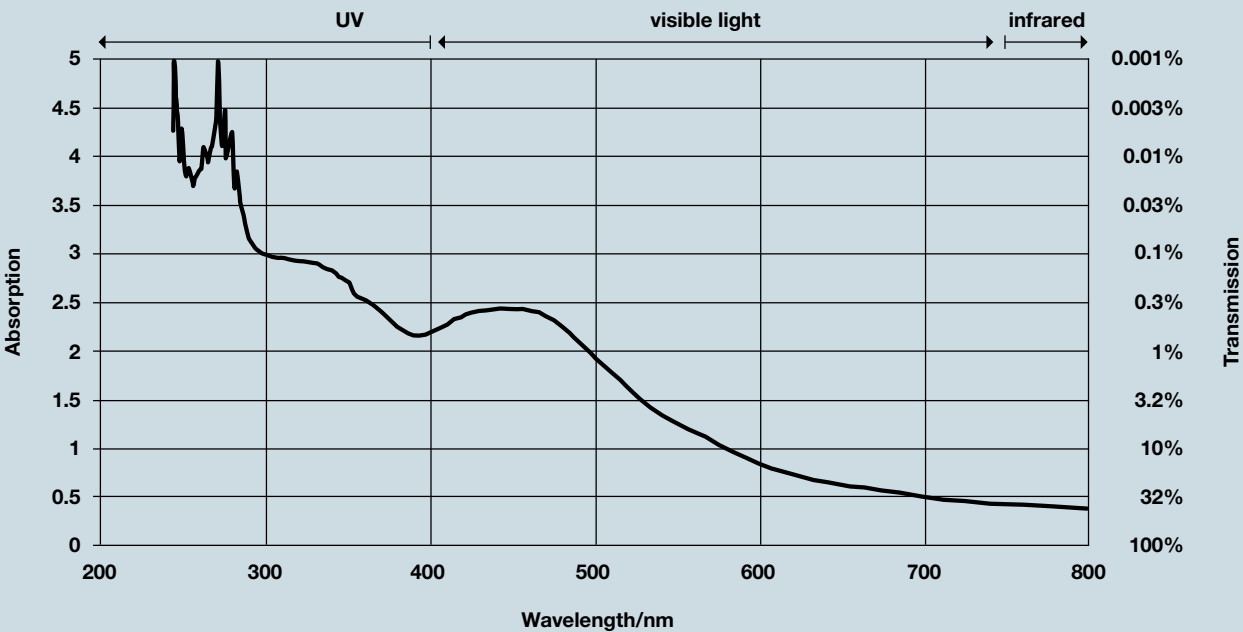
Amber Safe-Lock Tube

- > Available in 0.5, 1.5 and 2.0 mL sizes for storage and protection of light sensitive samples
- > Polypropylene tube for high chemical resistance

i See page 163 for ordering information.



- > Storage of light sensitive samples, such as,
 - SYBR green solutions
 - Ethidium bromide
 - Cy3 or Cy5 dyes



Absorption (A) = -log $\frac{I}{I_0}$

Application Tips for PCR

Using gradient PCR to optimize different reaction parameters

Gradient PCR is a technique that allows the empirical determination of optimal PCR conditions using the least number of steps. This optimization can often be achieved in just one experiment. Thermal cyclers from the Mastercycler[®] pro system¹ and from the classic Mastercycler series provide a gradient function that, in a single run, evaluates up to 12 different annealing, elongation and/or denaturation temperatures. During the same run, a number of other possible reaction variables can also be tested row by row. Problems with the amplification of a specific DNA fragment are an everyday occurrence in the lab. In many cases, nonspecific bands form during the PCR reaction, which hinder, or even prevent, downstream analyses or an unequivocal assessment of the PCR result. In such cases, PCR conditions must be optimized.

Eppendorf[®] gradient cyclers enable rapid testing of the optimum temperature conditions on one block and in one experiment. During the annealing step, a temperature gradient is built up consisting of 12 or 24 continuously increasing temperatures across the block. At the same time, each row with 8 or 16 wells shows perfect temperature homogeneity, allowing the possibility to simultaneously test additional reaction components, such as enzyme, primer and template DNA quantities.

Denaturing temperature

As a rule, the denaturation temperature for most DNA samples is between 94°C and 96°C. Depending upon its GC content, complexity and structure, the melting point of a DNA fragment can lie considerably above or below this range. However, to ensure minimum reduction of the polymerase activity, the temperature and the dwell time must be kept as low as possible. In these cases, determining the optimal denaturing temperature is greatly facilitated by the Eppendorf gradient cyclers. For this method, a gradient between 90°C and 99°C is set, thus empirically allowing an ideal compromise between enzyme-friendly reaction conditions and more efficient denaturing of DNA.

Elongation temperature

For most standard applications with Taq polymerase, optimization is seldom required. This is not the case for complex protocols, for example, the amplification of long fragments with a mixture of different polymerases. In this case, the optimization of the elongation temperature can play an important role because the ideal temperature for Taq polymerases and proofreading enzymes can vary considerably.

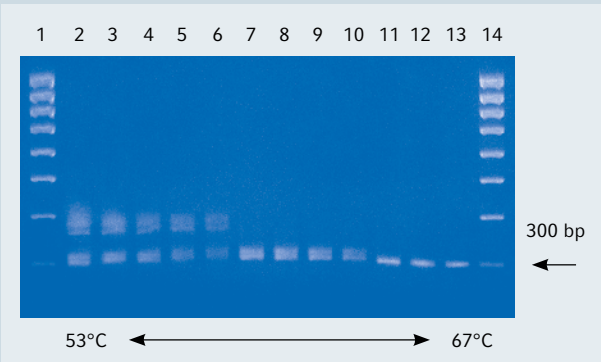


Fig. 1: Determination of the ideal annealing temperature

Annealing temperature

The selection of the annealing temperature is possibly the most critical component for optimizing the specificity of a PCR reaction. In most cases, this temperature must be empirically tested. The formation of nonspecific bands shows that the optimum temperature is often much higher than the calculated temperature (up to 12°C).

¹This product is licensed under U.S. patent Nos. 5,525,300, 5,779,981 and 6,054,263. The heated cover device is licensed under US 5,552,580 and foreign equivalents. The user of the Eppendorf Mastercycler pro might require additional rights for kits, reagents and other components required for his/her application. Such accompanying rights for these kits, reagents and other may be obtained by the respective holder of such rights. No rights are conveyed expressly, by implication or estoppel to any patents on real-time methods, including but not limited to 5' nuclease assays, or to any patent claiming a reagent or kit. Mastercycler pro upgraded to a Mastercycler ep realplex requires a Real-Time Thermal Cycler License under Applied's United States Patent No. 6,814,934 and corresponding claims in non-U.S. counterparts.

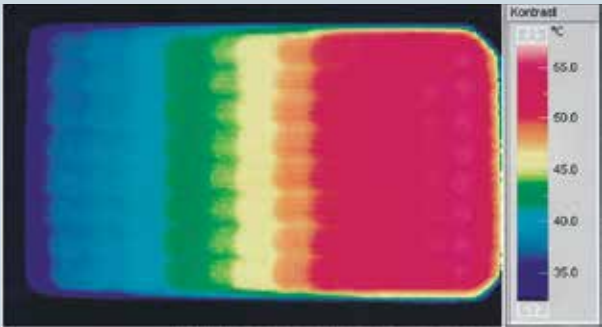


Fig. 2: Thermograph recording of the thermoblock of the Mastercycler gradient

Importance of Purity Factors

Sterility	Importance
In general, a product is defined as being sterile when no living organisms are present on its surface. However, a more accurate definition of sterility would be “the probability of one unsterile object being present among a number of sterile objects.”	Sterile products are required whenever the presence of germs may have a negative effect; for example, in the prevention of infection of samples or incorrect test results for microbiological experiments that would be caused by unsterile lab equipment.
An adequate indicator for reliable sterilization is a probability value of one in a million that living microorganisms shall be present on an object following a sterilization procedure. This is equivalent to an SAL (Sterility Assurance Level) of 10 ⁻⁶ , i.e., in a sample with 10 ⁶ (1,000,000) microorganisms, one single microorganism survives, or alternatively, a mass of 10 ⁶ (1,000,000) objects shall contain one nonsterile object following sterilization.	
For sterilization via irradiation, many directives stipulate a dose of 25 kGy to attain an SAL of 10 ⁻⁶ . This also applies to medicinal products that come into direct contact with the human body.	
Pyrogen- (endotoxin) free	Importance
Thermostable substances (glycoproteins) from the outer membrane of bacteria and other microorganisms can cause fever in humans and impair the growth of cell cultures.	Absence of pyrogen prevents endotoxin-based contamination in drug manufacture, cell culture and medical laboratories.
DNA-free	Importance
DNA is found in all cells of living entities, and it is the carrier of all genetic information. The highly sensitive PCR technique now enables the detection of individual molecules.	The presence of DNA could lead to false-positive results for different applications involving DNA (e.g., additional bands, positive “negative controls”). Note: Autoclaving does not remove traces of DNA.
Free of human DNA	Importance
To eliminate this potential source of contamination, the consumables are tested for the presence of human DNA. Even a single cell (e.g., skin particles) would be detected in the test. Manufacturing is virtually fully automated and monitored by staff wearing protective clothing.	Tests for human DNA prevent consumables from containing DNA that could lead to false-positive results (e.g., genetic tests in forensics)
RNase-free	Importance
RNases are enzymes that degrade RNA, the read copy of DNA. These enzymes are extremely resistant, even to autoclaving and irradiation.	RNase-free products are an absolute must in the field of molecular biology because RNA is highly sensitive and can be destroyed very quickly by RNases.
ATP-free	Importance
ATP is an energy-rich molecule that is part of all living cells; therefore, its presence can indicate biological contamination.	The test procedure for the quantitative and qualitative detection of ATP is already an integral part of hygiene monitoring, e.g., in the pharmaceutical industry.
Free of PCR inhibitors	Importance
PCR—the replication of DNA—has developed into one of the most important and commonplace molecular biology methods used in medical diagnostics, genetic counseling and all basic biological research. However, there are also substances that impair this reaction, so lab products must be free of these inhibitors.	It is essential that consumables used contain no impurities that could adversely affect PCR. This is particularly crucial for the amplification of minute quantities of genetic substances and for quantitative PCRs.

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf Quality



Description
Eppendorf® products with the Eppendorf Quality purity label fulfill everything expected of reliable, easy-to-handle consumables. With the aid of high-quality base material and permanent checks during production, our Eppendorf pipette tips, Eppendorf Tubes® and Eppendorf Combitips Plus® tips are ideal for many lab tasks. Also available: pipette tips in our newest “Sterile” purity level.

- Which requirements does Eppendorf Quality fulfill?**
- > High precision and accuracy as well as defined flow properties, ensured by precise molding of pipette tips and Combitips Plus¹ tips
 - > Minimal water retention, ensuring reliable volume readings and minimal adhesion
 - > Excellent running properties of Combitips Plus tips for reduced effort and smooth liquid handling (this is crucial for minute volumes)
 - > Single-handed opening and closing of microcentrifuge tubes, without sample material being contaminated
 - > Microcentrifuge tubes are highly stable, even when exposed to extreme thermal or mechanical strain
 - > Good chemical stability of consumables for use in many different applications

¹ U.S. Pats. 5,620,660/5,620,661

i For more information on Eppendorf purity levels, visit www.eppendorf.com/purity

- Quality control measures**
- > Tests for vapor tightness, lid-opening force, wall strength, force required to pierce the lid and centrifugal stability performed on microcentrifuge tubes on a daily basis
 - > Gravimetric measurements are performed on tips and Combitips in order to ensure international specifications
 - > All production tools are checked throughout the entire production process to ensure consistent quality
 - > All production steps, from the completion of the goods to packaging, are fully automated; manual intervention has been eliminated, and all subsequent risks caused by contamination have been virtually ruled out

A good basis: Start with top-quality material

- > All plastics used to produce consumables comply with international purity criteria
- > The dyes used for consumables are free of organic substances and heavy metals
- > Plastics are highly resistant to organic and inorganic acids/bases and organic solvents commonly used in laboratories

Pipette tips, microcentrifuge tubes, Deepwell plates and Combitips cylinders are made of PP (polypropylene), a relatively inert plastic characterized by minimum water retention as well as high dimensional and mechanical stability across a wide temperature range. Other plastics, such as PE (polyethylene), are also used, for example in the Combitips Plus pistons; the combination of PP and PE results in ideal running properties between these two parts.

Eppendorf PCR clean



Description

With the advent of PCR (polymerase chain reaction) and many other molecular biology methods in clinical and research labs, new purity criteria for consumables are necessary. Although there are no set directives in this field, we have analyzed the individual criteria and redefined our requirements governing PCR consumables.

All production batches are tested at an independent laboratory for the following:

- > Absence of human DNA: This is monitored in a PCR test that can detect quantities smaller than a single human cell (< 2 pg DNA)
- > Absence of DNase and RNase: Reaction buffers with one DNA and one RNA conductor are incubated to 37°C in the consumables (or, following liquid handling, in the consumables for several hours); the intactness of the nucleic acids is then tested via electrophoresis
- > Absence of PCR inhibitors: The consumables are tested in a separate PCR experiment to detect contamination by any substances that may have an adverse effect on the amplification procedure

A batch-related PCR clean certificate is available upon request.

Which requirements does “PCR clean” fulfill?

- > The miniscule amounts of genetic substance used for experiments must be protected from degradation (e.g., from DNases and RNases), i.e., all tubes and tips must be free of such impurities
- > Consumables that come into contact with PCR reactions must be free of PCR inhibitors, which would interfere with the amplification process
- > These plastic goods must also be free of contaminating nucleic acids, normally human DNA, which could infiltrate the plastic goods during the production process (e.g., via skin particles) and thus may lead to false-positive results

Clean production, clean packaging

Eppendorf® ensures that your lab receives clean, undamaged and fully functional consumables. Production and primary packaging of all products that are available in the PCR clean purity category are conducted under clean room conditions. The protective outer box is secured with a “PCR clean” seal to ensure that the product remains uncontaminated.

Only those consumables that have passed all of the necessary tests are given the “PCR clean” quality seal. The seal assures you that Eppendorf consumables are suited for direct use in experiments and analysis without the need for further treatment (such as autoclaving).

Product appearance, specifications, and/or prices are subject to change without notice.

Eppendorf Biopur®



Description

The Eppendorf Biopur quality and purity standard meets the requirements of the medical, pharmaceutical and food industries. All consumables in this highest-level purity category—pipette tips, Combitips Plus®¹ and Eppendorf® microcentrifuge tubes—are guaranteed to be sterile and free of pyrogen, RNase, DNA and ATP. This is achieved by a sophisticated, automated production process with different control protocols to rule out any danger of contamination caused by biological substances.

- > Purity is ensured, even for the most sophisticated applications
- > Reduced costs—inconclusive, usually expensive tests are no longer necessary
- > “Ready-to-use” products save time and labor
- > Individually wrapped consumables and resealable boxes provide effective protection against follow-up contamination

¹ U.S. Pats. 5,620,660/5,620,661

Individually packaged—for your safety

End users demand that Eppendorf Biopur products arrive clean, undamaged and fully functional. All products in the Eppendorf Biopur purity category, such as pipette tips (including those in boxes/racks), Combitips Plus tips and Safe-Lock microcentrifuge tubes, are delivered in their own individually wrapped packaging, thereby ruling out any danger of contamination.

A batch-related Biopur certificate is available at www.eppendorf.com/certificates

For more information on Eppendorf purity levels, visit www.eppendorf.com/purity

What does Eppendorf Biopur offer?

- All Eppendorf Biopur products are manufactured under one strict production process. They also meet our specific quality requirements regarding wetting behavior, liquid tightness, accuracy and chemical resistance, as well as the following criteria:
- > Sterile
- > Control and certification by an independent laboratory
- > Each individual batch is sterilized via beta irradiation
- > Certified sterility in accordance with USP XXII (United States Pharmacopoeia), DAB 10 (German Pharmacopoeia) and Ph.Eur. (European Pharmacopoeia)
- > Free of pyrogen, RNases, bacteria (E. coli), human DNA and ATP
- > Certified free of pyrogens in accordance with the kinetic-turbidimetric LAL test (FDA guidelines)
- > An Eppendorf Biopur batch-specific certificate is issued after all test criteria are met



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Pure Quality

Eppendorf purity grades for consumables

Eppendorf consumables stand for the highest quality and purity achieved by:

- > using pure raw materials
- > automatic production in clean room conditions
- > quality and functional checks of all lots
- > continuous quality assurance throughout the entire production process

With the strictest control criteria, internally and externally monitored, we guarantee consistently high quality of our products – lot by lot. Our consumables are available in a variety of purity grades: “Eppendorf Quality™” as well as advanced purity grades like “sterile”, “protein-free”, “PCR clean” and “Biopur®”. In addition to our internal process controls, each lot of these products are tested and certified by an accredited external laboratory. This allows us to ensure that we consistently meet our customer’s high demands when it comes to the high quality and purity of our products. As a special service, we make the inspection certificate for each delivered lot available online. The lot-specific certificates are available on request and on our website (www.eppendorf.com/certificates).

The basis: Top-quality material

- > All plastics used by Eppendorf to produce consumables comply with international purity criteria.

- > The dyes used to color consumables are free of organic substances and substances containing heavy metals.
- > Plastics, such as polypropylene, have a high chemical resistance to organic and inorganic acids/ bases and organic solvents commonly used in laboratories.

Eppendorf Quality:

The purity grade Eppendorf Quality are ideal for many tasks in the lab. To meet consistently our customer’s high demands on quality further measurements are performed specifically for individual product groups:

- > Precise molding guarantees high precision and accuracy. Each lot of tips is subject to gravimetric measurement during final testing. Low wetting ensures reliable volume readings and minimal adhesion.
- > Eppendorf Tubes® have to be opened and closed by one hand only; without sample material being contaminated. They are highly stable, even when exposed to extreme mechanical or thermal strain. Therefore, on a daily basis we check vapor tightness, lid-opening force, wall strength, force required to pierce the lid as well as resistance to centrifugation.
- > We check high resistance to centrifugation and sealability of deepwell plates and microplates.
- > All production tools are subject to frequent checks at regular intervals in order to guarantee consistent quality throughout the entire production period.

Sterile:

Besides fulfilling the quality criteria of “Eppendorf Quality” Eppendorf consumables with the purity grade “sterile” are sterilized and free of pyrogens. Each lot is tested and certified by an external accredited laboratory. Only those consumables that have passed all the necessary tests shall be labeled “sterile”, a quality seal which assures customers of the suitability of their Eppendorf consumables for direct use in experiments and analysis without the need for further treatment. Lot-specific certificates are available on request and on our website.

PCR clean:

All Eppendorf consumables with the purity grade “PCR clean” ensure not to interfere with the PCR reaction. Furthermore, all Eppendorf PCR clean products fulfill the quality criteria defined for our standard consumables (Purity grade “Eppendorf Quality”). The purity grade “PCR clean” is essentially achieved in not even letting contamination develop. Therefore, the corresponding plastic items are manufactured comparable to clean-room conditions. The manufacturing areas are spatially separated and only personnel in special protective clothing are granted access. Each lot with the purity grade PCR clean is tested and certified by an external accredited laboratory. Only those consumables that have passed all the necessary

tests shall be labeled “PCR clean”, a quality seal which assures customers of the suitability of their Eppendorf consumables for direct use in experiments and analysis. Lot-specific certificates are available on request and on our website.

Biopur:

To meet the highest demands of the medical, pharmaceutical, cosmetic, food industries and others, the quality and purity grade “Biopur” was defined. This purity is ensured by an elaborate, automated manufacturing process which safeguards the product against any contamination with biological substances. Furthermore, all “Biopur” products fulfill the quality standards defined for our standard consumables (Purity grade “Eppendorf Quality”). Each lot is tested and certified by an external accredited laboratory. Only those consumables that have passed all the necessary tests shall be labeled “biopur”, a quality seal which assures customers of the suitability of their Eppendorf consumables for direct use in experiments and analysis. Lot-specific certificates are available on request and on our website.

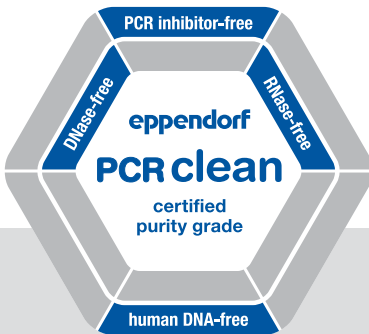
For further details please read page 40-41 and 160.



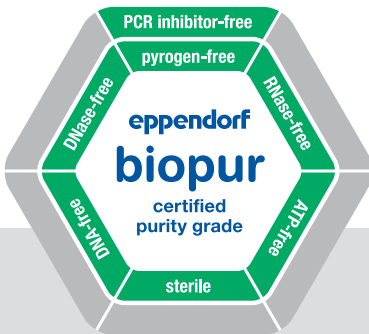
The Eppendorf purity grade “Eppendorf Quality” fulfill everything expected of reliable, easy-to-handle consumables. With the aid of high-quality base material and permanent checks during production, Eppendorf consumables in Eppendorf Quality are ideal for many tasks in the lab.



Eppendorf consumables with the purity grade “Sterile” are sterilized in accordance with ISO 11137 or ISO 11135 with a Sterility Assurance Level (SAL) of 10⁻⁶. Each lot of sterile products is tested for sterility and for the absence of endotoxins in accordance with Ph. Eur. 2.6.14 (free of pyrogens).



All Eppendorf consumables with the purity grade “PCR clean” are DNase and RNase free, and free of any PCR inhibitors. It is also guaranteed that the consumables are free of contaminating human DNA.



Consumables available in this highest possible degree of Eppendorf purity grades are guaranteed to be sterile and free of pyrogens, RNases, DNases, DNA and ATP as well as PCR inhibitors. Individually blistered or “micro batches” in re-sealable boxes provide effective protection against soiling and contamination.

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US Patents Eppendorf Group

Product	Patent number
BioBLU® 5p, BioBLU® 5c, BioBLU® 14c, BioBLU® 50c	US 8,522,996
BioFlo® 510, BioFlo® 610, BioFlo® PRO	US 8,292,591
Centrifuge 5418, 5418 R	US 6,866,621
Centrifuge 5418R, 5424R, 5430R, 5427R	US 8,845,967
Centrifuge 5424, 5424 R	US 6,866,621
Centrifuge 5424R, 5427 R	US 8,783,737
Centrifuge 5430, 5430 R	US 6,866,621
Centrifuge 5702 swing-bucket rotor	US 6,746,391

Centrifuge 5702, 5702 R, 5702 RH	US 6,866,621
Combitips advanced® 25mL / 50mL	US 8,839,685 US 8,813,584
Easypet® 3	US 9,028,774
Electrofusion Buffers	US 7,157,257
Electroporation Buffer	US 7,157,257
ep <i>Motion</i> ® 5073; ep <i>Motion</i> ® 5075	US 8,377,396
ep <i>Motion</i> ® 5075 VAC	US 6,666,978
Eppendorf BioSpectrometer® Family	US 8,464,171
Eppendorf Deepwell Plate	US 8,636,965
Eppendorf Microplates	US 8,636,965
Eppendorf Reference® 2	US 7,674,432 US 8,297,134 US 9,044,749
Eppendorf Reference® 2 multi channel	US 7,673,532
Eppendorf Reference® 2 single channel ≤ 1,000 µL	US 7,434,484
Eppendorf Reference® 2 multi channel	US 9,027,419
Eppendorf Research® plus	US 7,674,432 US 8,133,453 US 8,297,134
Eppendorf Research® plus ≤ 1000 µL	US 7,434,484
Eppendorf Research® plus multi channel	US 7,673,532
Eppendorf ThermoMixer® C	US 8,827,540 US 9,016,929
Eppendorf ThermoMixer® F0.5, F1.5, F2.0	US 8,827,540
Eppendorf ThermoMixer® FP	US 8,827,540
Eppendorf Xplorer®/ Eppendorf Xplorer® plus	US 6,499,365 US 6,778,917 US 7,585,468 US 7,674,432 US 7,694,592 US 8,028,592 US 8,096,198 US 8,570,051
Eppendorf Xplorer®/Eppendorf Xplorer® plus multi channel	US 7,673,532
Eppendorf Xplorer®/Eppendorf Xplorer® plus single channel ≤ 1,000 µL	US 7,434,484
Eppendorf Xplorer®/Eppendorf Xplorer® plus multi channel <1,250 µL	
epPoints®	US 8,762,198
Gradient block for Mastercycler Familiy	US 6,767,512 US 7,074,367
gripping tool for ep <i>Motion</i> ® 5073; ep <i>Motion</i> ® 5075	US 7,462,327
MagSep reagent kits	US 8,940,248
Mastercycler® pro Family	US 8,492,137 US 8,722,394

US Design Patents Eppendorf Group	Patent number
Mastercycler® pro Family; Mastercycler® nexus Family	US 8,322,918 US 8,722,394
MixMate®	US 7,575,363 US 8,550,696
Multiporator®	US 6,008,038
Optical sensor ep <i>Motion</i> ®; ep <i>Motion</i> ® 5070, 5057 - all types	US 6,819,437
PCR Cooler	US 6,616,897
PCR tubes 0,2 mL	US 5,863,791
PCR tubes stripes 0,2 mL	US 5,863,791
Pipetting tool for ep <i>Motion</i> ®	US 8,377,396
Repeater® Family	US 8,114,361
Repeater® M4	US 8,408,079
Repeater® stream/Xstream	US 6,499,365
Repeater® E3/ E3x	US 6,778,917 US 7,585,468 US 7,731,908
twin.tec PCR Plates	US 6,340,589 US 7,347,977 US 7,767,153 US 8,636,965
Universal block, Mastercycler®, Mastercycler® gradient	US 6,210,958
Uvette®	US 6,249,345
Eppendorf Xplorer®	US D0674913
Eppendorf Plates®	US D0601713 US D0601714
Eppendorf ThermoMixer®	US D0569988 US D0731237
Eppendorf µCuvette®	US D0731671
Repeater® stream and Repeater® Xstream	US D0548358
ep Dualfilter T.I.P.S.®	US D0679826
ep T.I.P.S.®	US D0465853
Eppendorf Research®	US D0375798
Centrifuge Rotor PCR	US D0441873
Uvette®	US D0437419
Eppendorf Centrifuge	US D0413676
Eppendorf Combitips®	US D0709623 US D0706946 US D0733909 US D0733910

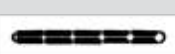
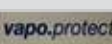
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Biomaster	®	Eppendorf AG
Biopur	®	Eppendorf AG
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CelliGen	®	Eppendorf, Inc.
CellTram	®	Eppendorf AG
Combilong	®	Eppendorf AG
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Combitips advanced	®	Eppendorf AG
Combitips plus	®	Eppendorf AG
condens.protect	®	Eppendorf AG
ConvexAccess	™	Eppendorf AG
CryoCube	®	Eppendorf AG
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epBlue	™	Eppendorf AG
epGreen	®	Eppendorf AG
ep <i>Motion</i>	®	Eppendorf AG
Eppendorf	®	Eppendorf AG
Eppendorf µCuvette	®	Eppendorf AG
Eppendorf Advantage	™	Eppendorf AG
Eppendorf BioPhotometer	®	Eppendorf AG
Eppendorf BioPhotometer plus	®	Eppendorf AG
Eppendorf BioSpectrometer	®	Eppendorf AG
Eppendorf Combitips	®	Eppendorf AG
Eppendorf EasyCon	™	Eppendorf AG

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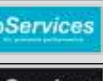
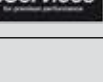
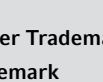
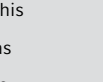
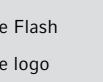
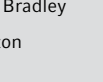
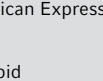
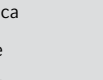
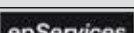
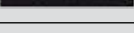
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Eppendorf LoBind	®	Eppendorf AG	In touch with life	®	Eppendorf AG
Eppendorf MagSep	TM	Eppendorf AG	InjectMan	®	Eppendorf AG
Eppendorf PerfectPiston	®	Eppendorf AG	Innova	®	Eppendorf, Inc.
Eppendorf PhysioCare Concept	®	Eppendorf AG	IsoTherm-System	®	Eppendorf AG
Eppendorf PiezoXpert	®	Eppendorf AG	Masterclear	®	Eppendorf AG
Eppendorf Plates	®	Eppendorf AG	Mastercycler	®	Eppendorf AG
Eppendorf Quality	TM	Eppendorf AG	Mastertip	®	Eppendorf AG
Eppendorf QuickLock	®	Eppendorf AG	Maxipettor	®	Eppendorf AG
Eppendorf QuickRelease	TM	Eppendorf AG	Microloader	TM	Eppendorf AG
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Eppendorf Research	®	Eppendorf AG	MixMate	®	Eppendorf AG
Eppendorf Research pro	®	Eppendorf AG	Multiporator	®	Eppendorf AG
Eppendorf SmartBlock	TM	Eppendorf AG	Nanotip	®	Eppendorf AG
Eppendorf SpectraZoom	®	Eppendorf AG	New Brunswick	TM	Eppendorf AG
Eppendorf ThermoMixer	®	Eppendorf AG	OptiBowl	®	Eppendorf AG
Eppendorf ThermoMixer 1.5 mL	®	Eppendorf AG	OptiTrack	®	Eppendorf AG
Eppendorf ThermoMixer plates	®	Eppendorf AG	PhysioCare Concept	®	Eppendorf AG
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Eppendorf ThermoStat expert	®	Eppendorf AG	Pipet Helper	®	Eppendorf AG
Eppendorf ThermoTop	®	Eppendorf AG	RecoverMax	®	Eppendorf AG
Eppendorf Top Buret	TM	Eppendorf AG	Repeater	®	Eppendorf AG
Eppendorf Tubes	®	Eppendorf AG	Silence Speed Simplicity	®	Eppendorf AG
Eppendorf twin.tec	®	Eppendorf AG	SplashProtect	TM	Eppendorf AG
Eppendorf Varitips	®	Eppendorf AG	STAGBIO	®	Eppendorf AG
Eppendorf Xplorer	®	Eppendorf AG	ThermoMixer	®	Eppendorf AG
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epPoints	®	Eppendorf AG	TransferTip	®	Eppendorf AG
epServices for premium performance	®	Eppendorf AG	UVette	®	Eppendorf AG
epT.I.P.S.	®	Eppendorf AG	Vacufuge	®	Eppendorf AG
Excella	®	Eppendorf, Inc.	vapo.protect	®	Eppendorf AG
FastTemp pro	®	Eppendorf AG	vapoprotect	®	Eppendorf AG
fedbatch-pro	®	DASGIP Information and Process Technology GmbH	Varipette	®	Eppendorf AG
FemtoJet	®	Eppendorf AG	Varispenser	®	Eppendorf AG
Femtotips	®	Eppendorf AG	Vaudaux	®	Vaudaux-Eppendorf AG
flexlid	®	Eppendorf AG	Vaudaux Eppendorf	®	Vaudaux-Eppendorf AG
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Galaxy	®	Eppendorf, Inc.			

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	TM	Eppendorf AG		®	Eppendorf AG
	®	Eppendorf AG		®	Eppendorf AG
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