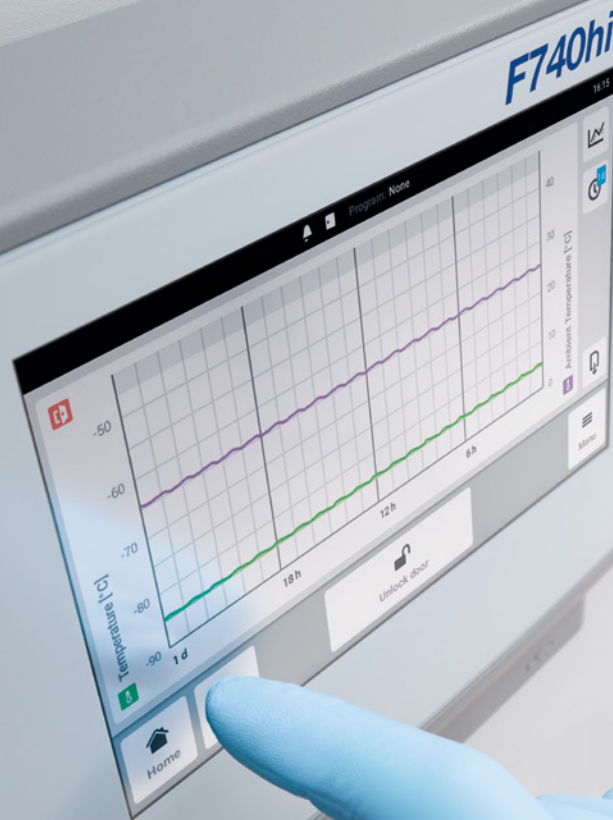


Now with all  
»Green« cooling



# Protect What Matters

Store safer, store larger, store smarter: the CryoCube® F740 Series ULT Freezers

# »Design the freezer around the sample.«

By combining the longevity and quality of our U725-G family with future-proven sample monitoring and management systems, we designed a new icon for -86 °C ultra-low temperature freezers: **The CryoCube F740 series.**



## Concerned about your sample safety?

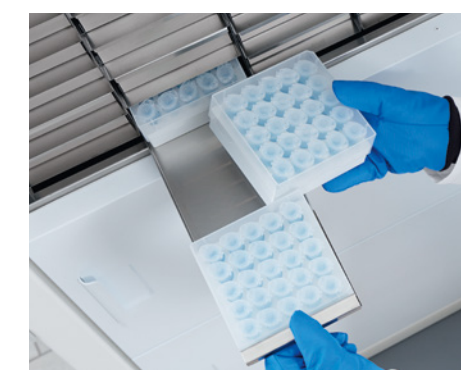
- > Temperature monitoring and data export for documentation\*
- > Controlled access to samples for greater security\*
- > Dedicated alarm and backup system for 24/7 sample safety

\*Available on 'i' series models.



## Suffering from energy bills?

- > High-efficiency insulation for low power consumption
- > Special gaskets on inner and outer doors to keep the cold inside
- > High-efficiency compressor systems provide excellent performance with minimized energy usage



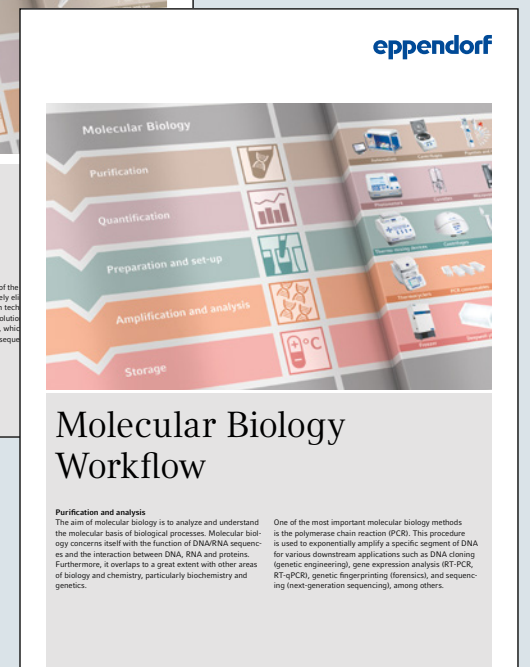
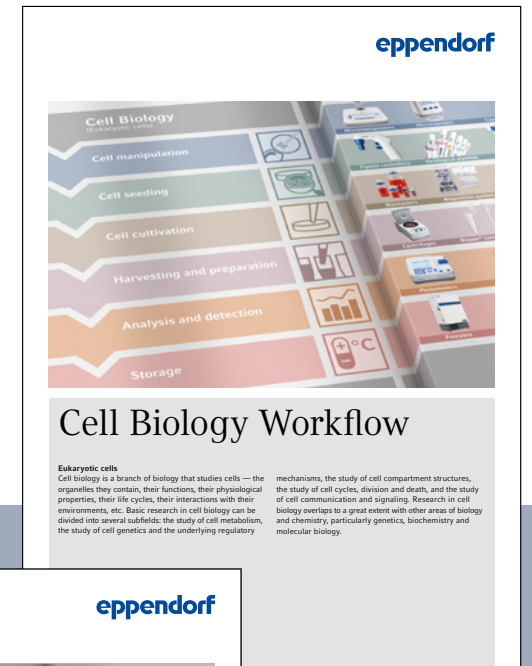
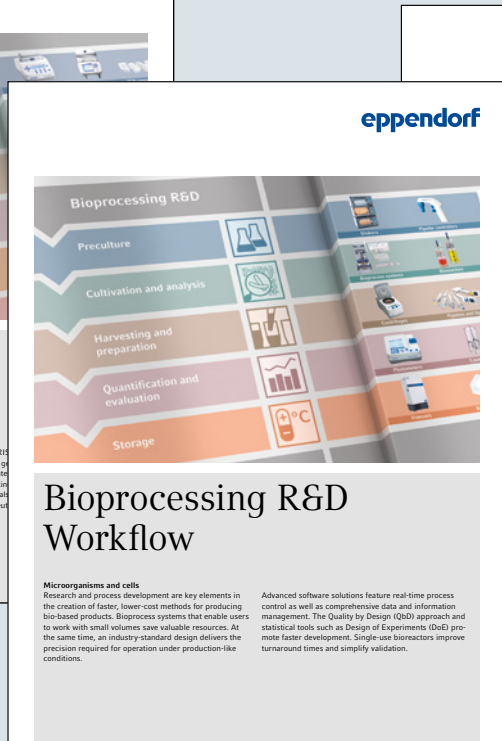
## Lost in samples?

- > Broad range of metal racks for flexible vessel usage
- > Storage boxes fitting to standard vessel sizes
- > Sample management system to keep your inventory in order



Your processes and workflows require you to invest a lot of time and a lot of resources. So much of your success depends on the care and handling of your valuable samples. After spending countless hours considering the many devices and steps utilized to create the sample, have you adequately considered where you will store it? Does your long-term storage solution match the value of your processes and samples?

After all this work, do you know where your samples are?





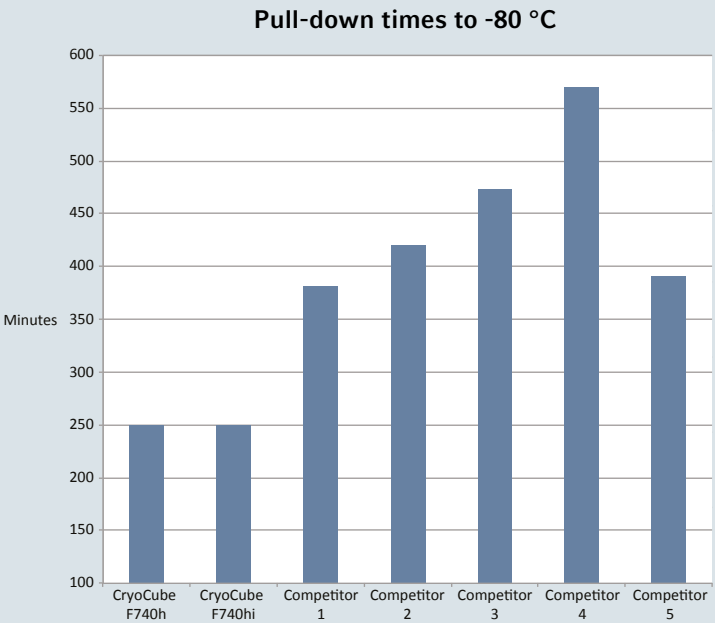
# Safety by Design

**What are the building blocks for a safe sample vault?**

- > Robust stainless-steel bodies
- > Polyurethane foam insulation enforced by high-quality vacuum insulated panels
- > Flat and flexible outer gaskets
- > Optimized inner gaskets
- > High-efficiency and reliable cascade compressor systems
- > Precise temperature management

**The crucial factor for a steady -86 °C? Best practices**

How often do you open the ULT freezer door per day? For how long? It is best practice to always enter and exit the freezer as quickly as possible when storing new samples or attempting to locate a vial or tube which is stored out of sight. However, this takes time. The more time it takes, the more the temperature of both the cabinet and your frozen samples increases. The samples become exposed to the warm environment. The longer the door remains opened, the more you need efficient and reliable compressor systems to guarantee fast recovery and pull-down back to -80 °C.



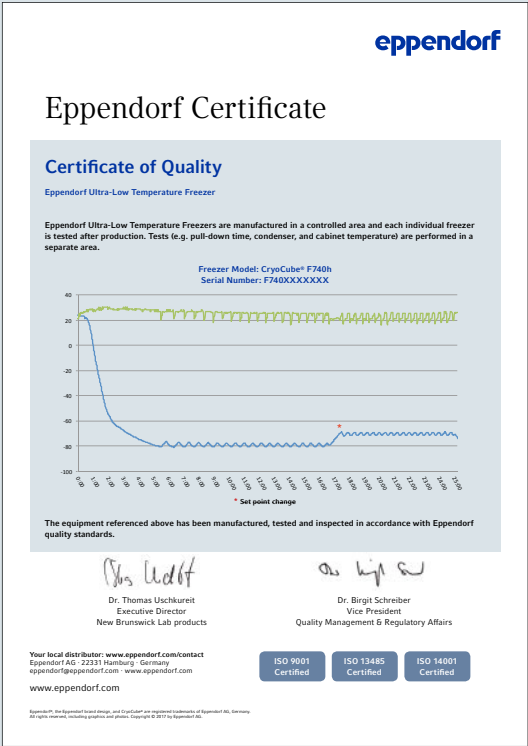
This graph shows the pull-down times for a CryoCube F740h, F740hi, and five competitors to reach -80 °C. All measurements based on published data.

# Confidence in Quality

Eppendorf has a long-standing history of innovation and quality, and our freezer manufacturer process is no exception. Each Eppendorf ULT freezer is thoroughly inspected to meet our rigorous quality guidelines. This process is documented by an individual certificate, complete with serial number, provided as standard for your documentation.

As your expert partner for reliable, high-quality, and efficient storage solutions, Eppendorf finely engineers each freezer with care, using only the highest quality materials to ensure a long lasting freezer that offers peace of mind and security. CryoCube Freezers are designed to offer a long-term value over the lifetime of its ownership.

You can entrust your valuable samples to the new Eppendorf CryoCube F740 series, and you can trust your investment in all finely-engineered Eppendorf instruments.





# Expanded Options for Enhanced Security

- We had a simple, yet ambitious, goal for designing the CryoCube F740: to take what was great about our Innova® ULT Freezers and make it even better. This resulted in a top-of-the-line freezer; a proven concept backed by technological innovation:
- > Reduced power consumption translates to lower operating costs
  - > Engineered for quiet operation to provide better working conditions
  - > Advanced interface models feature unique user access and logging to provide the highest in sample security and safety
  - > Increased sample storage capacity over its predecessors by 14 %
  - > Optimized temperature accuracy for safe sample storage
  - > Insulated inner doors with gaskets minimize temperature fluctuation during samples access
  - > Inverter controller allows freezers to be used on 100, 115, 208, and 230 V circuits with a simple change of power cable
  - > 3 or 5 inner compartments for flexible layout
  - > Choose left- or right-handled outer door for greater flexibility
  - > 3 models available; select the best fit for your needs:

Model	F740h	F740hi	F740hiw
LCD with softkey inputs	■	–	–
Touchscreen with advanced interface	–	■	■
Access code	–	■	■
Green cooling by hydrocarbons	■	■	■
Air-cooled	■	■	–
Water-cooled	–	–	■
3 compartment	■	■	■
5 compartment	■	■	■
Left-handled outer door	■	■	■
Right-handled outer door	■	■	–



# CryoCube® F740hi

**Natural refrigerants** for future-proven cooling\*

**Automated vent port** for quick re-access to samples

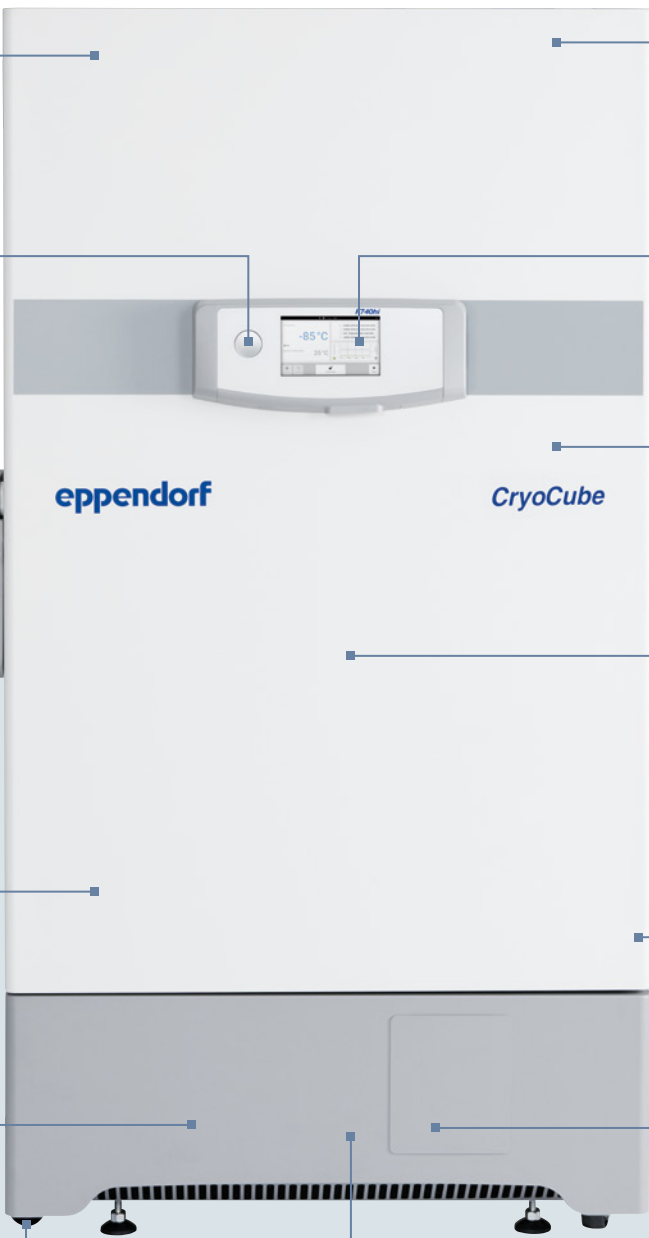
**Ergonomically designed door handle** for smooth and easy operation

**Personalized access control** for highest sample safety\*\*

**Proven two-stage compressor cascade systems** for long-term working conditions

**Easy access** to air filter enables regular cleaning, resulting in better performance

**Heavy duty castors** to easily move the freezer to a new position



**Vacuum insulated panels** reinforced with polyurethane foam insulation are standard for safe sample storage

**Intuitive user interface** for easy temperature and setting monitoring as well as data export via USB\*\*

**Robust stainless-steel body** for high sample safety and easy cleaning

**Internal probe head** located in freezer center for reliable temperature measurement

**Lockable security plate** protects power and alarm-off switches from accidental shut-off

**Optional chart recorder** for 24/7 documentation on paper

**Integrated voltage inverter** for flexible usage with 100 – 230 V mains/power supply



- > **Personal storage preference:** 3 or 5 compartment/shelf versions for flexible sample storage (3 inner doors)
- > **Built for convenience:** stainless steel interior for easy cleaning



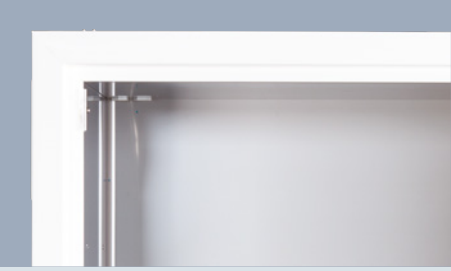
- > **Ergonomic entry:** comfortable door handle for easy opening
- > **Controlled access:** personalized access codes\*\*, when necessary



- > **Silence level:** optimized air channel reduces noise output down to 41.3 dB\*\*
- > **Flexible monitoring:** use Ethernet\*\*, RS485, or standard remote alarm socket (BMS/potential free contact)



- > **Keep the cold inside:** efficient flat and flexible seal at outer door
- > **Easy maintenance:** flat seals can be quickly and easily wiped and cleaned



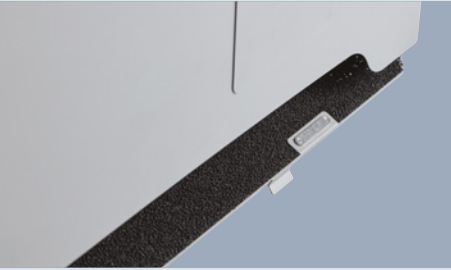
- > **External probes or back ups:** two access ports in the upper corner
- > **Keep the cold inside:** polyurethane foam enforced by vacuum insulation panels



- > **Enhanced shelf design:** integrated airways for fast and consistent air circulation
- > **Keep your fingers safe:** rounded metal rims at shelves



- > **Double your safety:** gaskets on inner doors come standard to reduce air leakage
- > **Confident closing:** magnetic door-closing system



- > **Easy access:** quickly open the bottom-mounted air filter for easy cleaning and maintenance
- > **Simple solution:** no tools required to access filter

\*Available on 'h' series models.  
\*\*Available on 'i' series models.



# Complete Control

Worried about the safety of your high value samples within your ULT freezer? With the Eppendorf ULT monitoring concept available on 'hi' series models, you can check the freezer performance whenever you want. All temperature data and all events are stored in the freezer control unit.

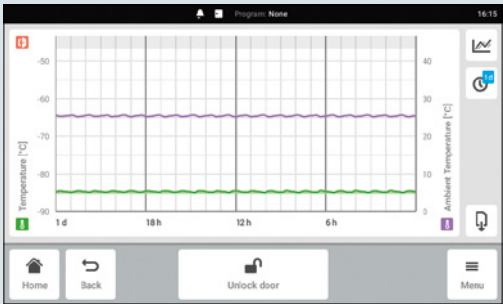
### Focus on the essentials

The handling experience is based on our PhysioCare Concept® combined with extensive user test sessions.

- > On-board data storage means you are not dependant on auxiliary and secondary devices to keep track of freezer data
- > Easily transfer your information to your computer or colleague using the export feature and front-mounted USB port
- > Quickly and easily adjust your setpoints with a single finger, even while wearing gloves
- > Conveniently see all your important settings and data on a single screen with customizable views
- > Event tracking for controlled environments
- > Easily exchange data for documentation by USB
- > Electronic lock system for controlled access and higher sample safety
- > Adaptable alarm settings for individual needs



Quickly review your important parameters on the home screen



Easily review your freezer history on the temperature monitoring screen

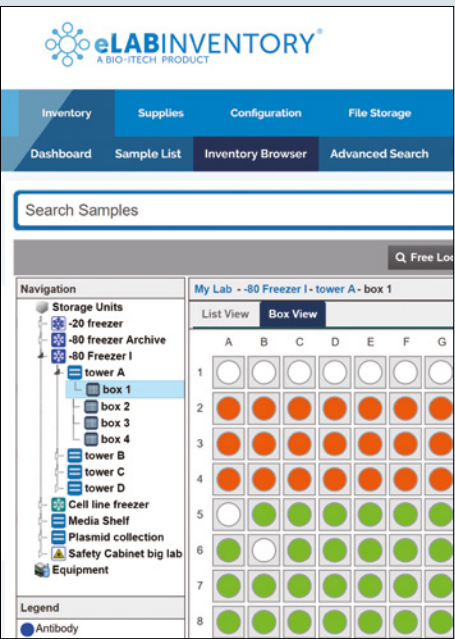
# Stay Organized

### Keep track of your samples with eLABInventory

eLABInventory is a sample management software available from Bio-ITech. The tool organizes any item in the laboratory inventory, including specimens, materials, samples, and chemicals. Store samples in self-configured storage units such as freezers or refrigerators. eLABInventory is flexible and fully configurable to work in your laboratory.

- > Centralized system for single or multiple labs
- > Fully configurable to fit any type of laboratory
- > Stores any type of samples, specimens, and materials for high flexibility
- > Works on any device, delivered via the cloud or on-premise
- > Intuitive user interface includes visual inventory browsing for easy handling
- > Barcode labelling for high-throughput
- > Import or export to other formats for data flexibility
- > Track and tracing for audit trail
- > GLP compliant Sample Management Software
- > 21 CFR part 11 compliance for documentation security

For more information about ordering, visit [www.eLABInventory.com](http://www.eLABInventory.com)





# The Eco-Logical Choice

## Paying your own power bill?

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 Eppendorf ULT freezers are designed to help you save energy without compromising sample security.

- > A high-efficiency compressor control system reduces cycling times to lower energy consumption and increase freezer longevity
- > High-quality insulation materials and inner/outer door gaskets provide ultimate temperature control and optimized energy efficiency
- > Environmentally safe, HCFC-free and CFC-free refrigerants for "h" versions minimize greenhouse gases
- > Biodegradable and commercially-available, high performance, synthetic compressor lubricants prevent "oil-logging"
- > Eco/Green mode to further reduce energy (while having more dynamic temperature accuracy)
- > A single, quiet, condenser fan reduces energy consumption; compared to many freezers that require two
- > Built with 95 – 98 % recyclable materials (by weight)
- > Meets WEEE directives for disposal

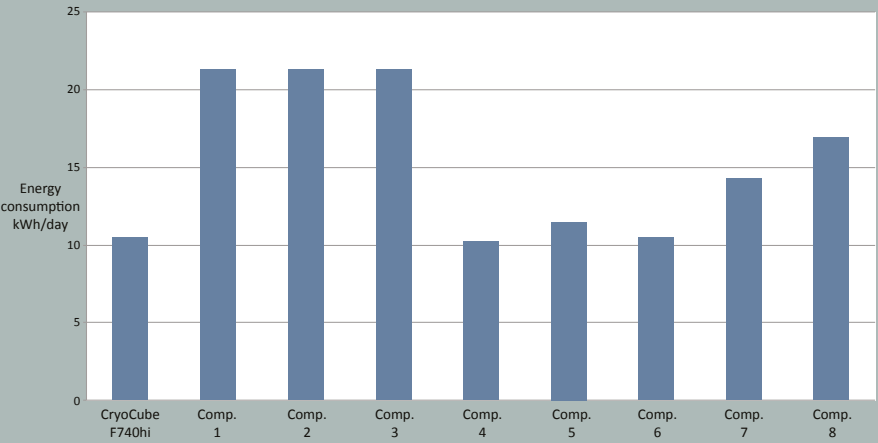
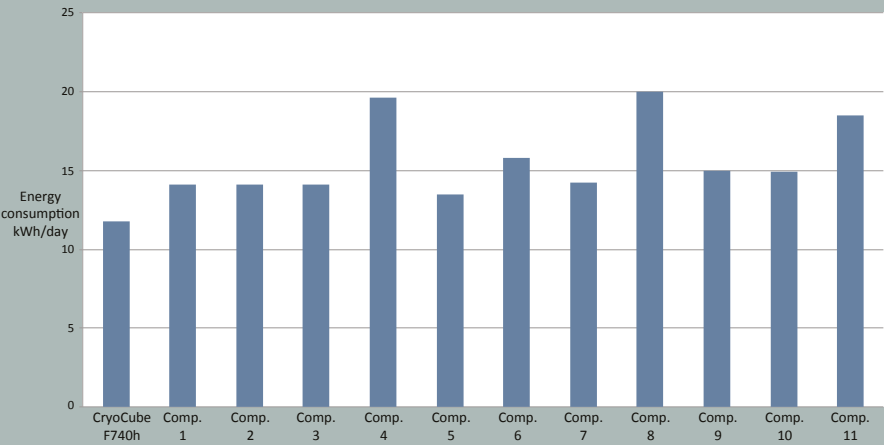
**New CryoCube F740hi (10.5 kWh/day) vs. Innova U725-G (12.2 kWh/day)**

- > 14 % less energy consumption
- > 1,300 € of cost saving in 10 years
- > 2.2 tons of CO<sub>2</sub> emissions saved over 10 years

Calculation: Average cost per kWh: 0.21 € (EuroStat 2015); For every kilowatt hour of electricity you DO NOT use, you save 352 g of carbon dioxide from entering the atmosphere.



A comparison of the number of kilowatt hours per day it takes to keep 500 – 600 two inch boxes at a temperature of -80 °C in comparable classical freezers with a volume of 700 – 800 L.\*



The high-efficiency CryoCube F740hi (230 V/50 Hz) can maintain the storage temperature using 10.5 kWh/day at -80 °C, requiring far less energy than many major competitors in the field (with focus on temperature accuracy).\*

\*Values based on published data (230 V/50 Hz) of suppliers as of autumn 2016.



## Eppendorf Handling Solutions

Liquid Handling  
Cell Handling  
Sample Handling



To make your job in the lab easier and more efficient – with this goal in mind we are developing products and solutions in the areas of Liquid Handling, Cell Handling, and Sample Handling. Visit the Eppendorf Handling Solutions online sphere and dive into the area of your choice, learn new things, and have fun as well: [www.eppendorf.com/handling-solutions](http://www.eppendorf.com/handling-solutions)

## Sample Handling

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.



### Eppendorf Tubes® 5.0 mL

Eppendorf Tubes 5.0 mL fill the gap between existing tube formats and enable the simple and safe processing of volumes up to 5.0 mL.

- > Ergonomic operation with snap cap or screw cap
- > Exceptionally high-quality, transparent polypropylene



### Eppendorf Conical Tubes

The Eppendorf Conical Tubes 15 mL and 50 mL extend the volume range of Eppendorf's microcentrifuge tubes.

- > Convenient and safe cell culture applications
- > Sample preparation in microbiology and molecular biology labs



### Eppendorf Deepwell Plates

High-performance plates for all manual and automated applications from sample storage at -86 °C to DNA denaturation at 100 °C.

- > OptiTrack® matrix for up to 30 % faster sample identification
- > RecoverMax® well design for maximum sample recovery and excellent mixing



### Eppendorf BioSpectrometer® basic

The Eppendorf BioSpectrometer basic is a compact spectrophotometer that combines easy handling with highly reproducible analysis.

- > Absorbance measurement for one or more wavelengths; scans from 200 nm to 830 nm
- > Spectral graph to display sample purity with automatic ratio calculation

Know how to care for your centrifuge?

Find out helpful tips on [handling-solutions.eppendorf.com](http://handling-solutions.eppendorf.com)





# CryoCube® F740 Series Technical Specifications

Power	Mains/power supply (A)	100 V, 60 Hz
		115 V, 60 Hz
		208 - 230 V, 60 Hz
		230 V, 50 Hz
	kWh per day <sup>1</sup> (-80 °C/-70 °C)	100 V, 60 Hz 115 V, 60 Hz 208 - 230 V, 60 Hz 230 V, 50 Hz
Capacity	Overall	
	Compartments	
	Racks per shelf	
	Racks per freezer	
	Box capacity per rack	2 in (53 mm) box (H)
		3 in (76 mm) box (H)
		4 in (102 mm) box (H)
	Box capacity per freezer	2 in (53 mm) box (H)
		3 in (76 mm) box (H)
		4 in (102 mm) box (H)
	Sample capacity per freezer	2 in (53 mm) box (H)
Performance	Noise level (dB)	230 V, 50 Hz
	Max. heat output (Watts at -80 °C)	100 V, 60 Hz
		115 V, 60 Hz
		208 - 230 V, 60 Hz
		230 V, 50 Hz
Refrigerant	50/60 Hz models	
Dimensions	External <sup>2,3, 4</sup>	Height
		Width
		Depth
	Internal	Height
		Width
		Depth
Weight	Net weight	
	Shipping weight	

\*Specifications subject to change.  
<sup>1</sup>Empty freezer with shelves fitted, upright freezers only, set point -80 °C, 20 °C ambient conditions. <sup>2</sup>Optional CO<sub>2</sub>/LN<sub>2</sub> back-up systems add 8.65 cm/3.5 in to height.  
<sup>3</sup>To allow for handles and hinges, add 80 mm to width of upright freezers and 110 mm to the depth. <sup>4</sup>Door open adds up to 15 cm. <sup>5</sup>Compartments 1 – 4/(5th compartment)

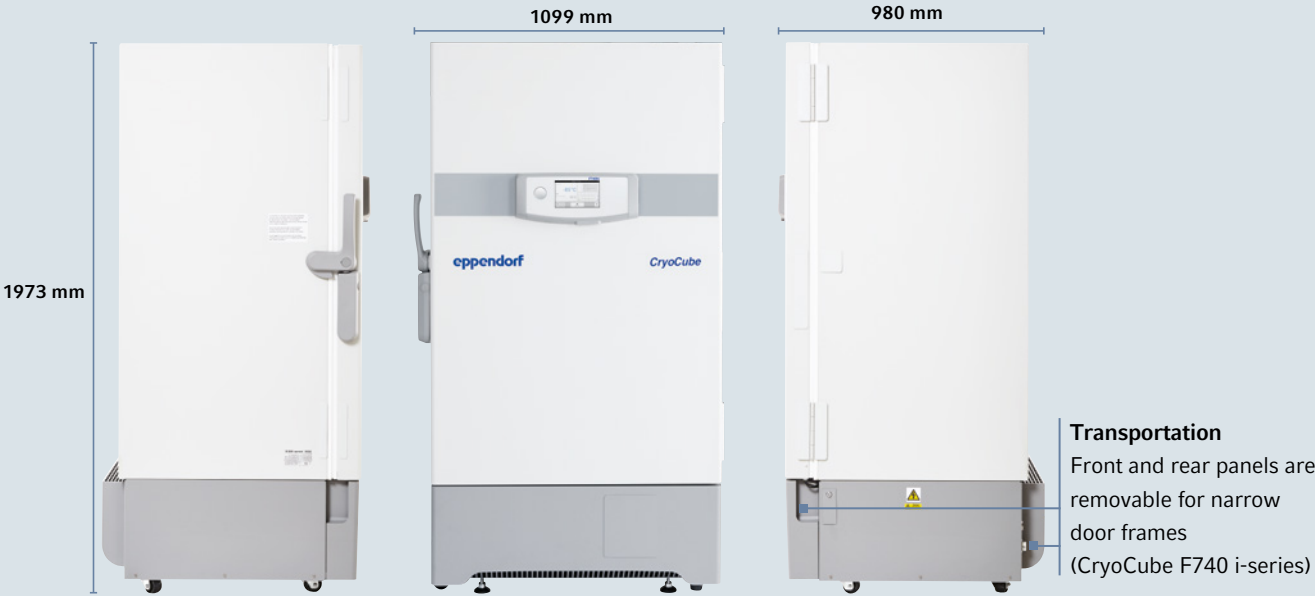
F740h		F740hi		F740hiw	
15		15		15	
12		12		12	
9		9		9	
6		6		6	
13.0/8.9		11.6/8.3		11.7/ 8.5	
13.0/8.9		11.6/8.3		11.7/ 8.5	
11.8/8.1		10.5/7.5		10.6/ 7.7	
11.8/8.1		10.5/7.5		10.6/ 7.7	
740 L (26.13 ft³)		740 L (26.13 ft³)		740 L (26.13 ft³)	
3	5	3	5	3	5
6	6	6	6	6	6
18	30	18	30	18	30
32	16 (24) <sup>5</sup>	32	16 (24)	32	16 (24)
20	8 (16) <sup>5</sup>	20	8 (16)	20	8 (16)
16	8 (12) <sup>5</sup>	16	8 (12)	16	8 (12)
576	528	576	528	576	528
360	288	360	288	360	288
288	264	288	264	288	264
57,600	52,800	57,600	52,800	57,600	52,800
47.8		41.3		41.3	
542		483		488	
542		483		488	
492		438		442	
492		438		442	
R290/R170		R290/R170		R290/R170	
197.3 cm/77.7 in		197.3 cm/77.7 in		197.3 cm/77.7 in	
109.9 cm/43.3 in		109.9 cm/43.3 in		109.9 cm/43.3 in	
91.5 cm/36.0 in		98.0 cm/38.6 in		98.0 cm/38.6 in	
139.0 cm/54.7 in		139.0 cm/54.7 in		139.0 cm/54.7 in	
86.5 cm/34.1 in		86.5 cm/34.1 in		86.5 cm/34.1 in	
62.1cm /24.5 in		62.1cm /24.5 in		62.1cm /24.5 in	
308.0 kg/679.0 lbs	317.0 kg/699.0 lbs	315.0 kg/694.0 lbs	333.0 kg/734.0 lbs	320.0 kg/705.0 lbs	328.0 kg/723.0 lbs
357.0 kg/787.0 lbs	366.0 kg/807.0 lbs	364.0 kg/825.0 lbs	382.0 kg/842.0 lbs	369.0 kg/813.0 lbs	377.0 kg/831.0 lbs

## Gain the CryoCube® Advantage




### Use your limited space for smarter storage

Your lab has limited space for large instruments. Use that space in the smarter way with the CryoCube F740h. Based on the footprint, fit more boxes and more samples in every square meter. Don't let an oversized freezer with limited capacity take up space in your lab!

	CryoCube F740h	Innova U725-G	Competitor Freezer
Dimensions, W × D	1.099 × 0.915 m	1.025 × 0.867 m	1.102 × 0.96 m
Footprint	1.006 m²	0.89 m²	1.06 m²
Total boxes	576	504	600
Boxes/m²	572	567	566



Freezer Ordering information

Model	Right or Left Door Handle	Inner Compartments	Voltage*	Order No.
<b>F740h,</b> Air-cooled 	Left	5	115 V	F740540035
			208 V	F740540035
			230 V	F740340031
		3	115 V	F740540015
			208 V	F740540015
			230 V	F740340011
	Right	5	115 V	F740540045
			208 V	F740540045
			230 V	F740340041
		3	115 V	F740540025
			208 V	F740540025
			230 V	F740340021
<b>F740hi,</b> Air-cooled 	Left	5	115 V	F740220035
			208 V	F740420035
			230 V	F740320031
		3	115 V	F740220015
			208 V	F740420015
			230 V	F740320011
	Right	5	115 V	F740220045
			208 V	F740420045
			230 V	F740320041
		3	115 V	F740220025
			208 V	F740420025
			230 V	F740320021
<b>F740hiw,</b> Water-cooled 	Left	5	115 V	F740220135
			208 V	F740420135
			230 V	F740320131
		3	115 V	F740220115
			208 V	F740420115
			230 V	F740320111

\*230 V are 50-60 Hz with European (Schuko) plug, further plug versions available

Accessories Ordering Information

Description	Order no.
Chart recorder (Type II), 100 – 120 V/50 – 60 Hz, powered by freezer	F652999001
Chart recorder (Type II), 208 – 230 V/50 – 60 Hz, powered by freezer	F652999002
Chart recorder pens (Type II), 3 pk	F652999004
Chart recorder paper (Type II), 0 to -100 °C, 60 pc.	F652999003
CO <sub>2</sub> back-up system, 100 V/50 – 60 Hz, Innova® (“narrow” version)	F652999005
CO <sub>2</sub> back-up system, 120 – 220 V/60 Hz, Innova® (“narrow” version)	U9043-0002
CO <sub>2</sub> back-up system, 230 V/50 Hz, Innova® (“narrow” version)	U9043-0004
LN <sub>2</sub> back-up system, 100 V/50 – 60 Hz, Innova® (“narrow” version)	F652999006
LN <sub>2</sub> back-up system, 120 – 220 V/60 Hz, Innova® (“narrow” version)	U9044-0002
LN <sub>2</sub> back-up system, 230 V/50 Hz, Innova® (“narrow” version)	U9044-0004

Freezer Rack Ordering Information

Rack type	Drawer height (rack dimensions D × W × H)	Order no.	Total racks per freezer	Boxes per rack	Total # of boxes per freezer
<b>*Drawer, stainless steel, 3-shelf</b>	2 in or 53 mm (563 × 140 × 449 mm)	6001072210	18	32	576
	2.5 in or 64 mm (563 × 140 × 412 mm)	6001072910	18	24	432
	3 in or 76 mm (563 × 140 × 414 mm)	6001072310	18	20	360
	4 in or 102 mm (563 × 140 × 431 mm)	6001072410	18	16	288
	5 in or 127 mm (563 × 140 × 414 mm)	6001072510	18	12	216
<b>*Side access, stainless steel, 3-shelf</b>	2 in or 53 mm (569 × 139 × 444 mm)	6001071210	18	32	576
	2.5 in or 64 mm (569 × 139 × 406 mm)	6001071910	18	24	432
	3 in or 76 mm (569 × 139 × 412 mm)	6001071310	18	20	360
	4 in or 102 mm (569 × 139 × 444 mm)	6001071410	18	16	288
	5 in or 127 mm (569 × 139 × 414 mm)	6001071510	18	12	216
	DWP (549 × 139 × 444 mm)	6001071110	18	48	864
<b>**Drawer, stainless steel, 5-shelf, shelves 1 – 4</b>	2 in or 53 mm (563 × 140 × 231 mm)	6001022210	24	16	384 (528)
	2.5 in or 64 mm (563 × 140 × 204 mm)	6001022910	24	12	288 (408)
	3 in or 76 mm (563 × 140 × 166 mm)	6001022310	24	8	192 (288)
	4 in or 102 mm (563 × 140 × 216 mm)	6001022410	24	8	192 (264)
<b>**Side access, stainless steel, 5-shelf, shelves 1 – 4</b>	2 in or 53 mm (569 × 139 × 230 mm)	6001021210	24	16	384 (528)
	2.5 in or 64 mm (569 × 139 × 205 mm)	6001021910	24	12	288 (408)
	3 in or 76 mm (569 × 139 × 167 mm)	6001021310	24	8	192 (288)
	4 in or 102 mm (569 × 139 × 230 mm)	6001021410	24	8	192 (264)
	DWP (549 × 139 × 224 mm)	6001021110	24	24	576 (792)
<b>*Drawer, stainless steel, 5-shelf, shelf 5</b>	2 in or 53 mm (563 × 140 × 346 mm)	6001082210	6	24	144 (528)
	2.5 in or 64 mm (563 × 140 × 344 mm)	6001082910	6	20	120 (408)
	3 in or 76 mm (563 × 140 × 331 mm)	6001082310	6	16	96 (288)
	4 in or 102 mm (563 × 140 × 324 mm)	6001082410	6	12	72 (264)
	5 in or 127 mm (563 × 140 × 276 mm)	6001082510	6	8	48 (48)
<b>*Side access, stainless steel, 5-shelf, shelf 5</b>	2 in or 53 mm (569 × 139 × 343 mm)	6001081210	6	24	144 (528)
	2.5 in or 64 mm (569 × 139 × 339 mm)	6001081910	6	20	120 (408)
	3 in or 76 mm (569 × 139 × 330 mm)	6001081310	6	16	96 (288)
	4 in or 102 mm (569 × 139 × 343 mm)	6001081410	6	12	72 (264)
	5 in or 127 mm (569 × 139 × 277 mm)	6001081510	6	8	48 (48)
	DWP (549 × 139 × 343 mm)	6001081110	6	36	216 (792)

**\*MAX racks for maximum capacity.**  
**\*\*Compatible with Premium/CryoCube® F570 racks.**

The racks from Innova U360, U535, U725, and U725G are compatible with the CryoCube F740 series (3 compartment). Up to 6 racks per compartment/shelf do fit. For 2 in or 53 mm freezer boxes, 504 boxes can be stored by using the Innova-line compatible racks. For maximum capacity (576 boxes), we recommend the MAX racks (not all reverse compatible to Innova ULT freezers).



# »Eppendorf ULT Freezers: Your samples are safe with us.«

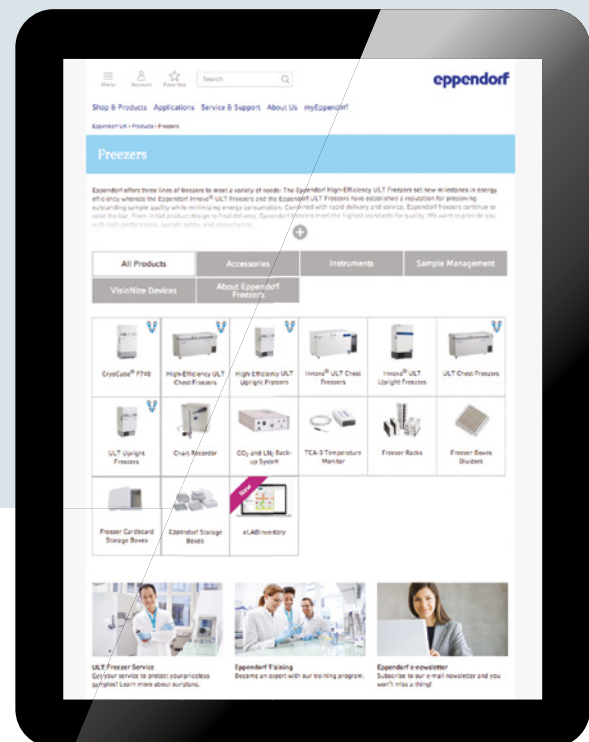
## View even more freezers, accessories, and options

Eppendorf ULT Freezers have established a reputation for preserving outstanding sample quality while minimizing energy consumption. Combined with rapid delivery and service, Eppendorf freezers continue to raise the bar.

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