## eppendorf



## Zero Compromise

Need an all-purpose storage solution? CryoCube® F440 series ULT Freezers

# Under Control, Future Proof.

How often do you open your ULT freezer door every day? For how long? What are the crucial factors for maintaining a steady -80 °C? It's best practice to always open and close your freezer as quickly as possible when accessing samples. However, locating and removing the correct sample can take time. The more time it takes, the more the temperature of your frozen samples increases as they are exposed to the warm environment. The efficient and reliable compressor systems of CryoCube F440 series ULT freezers ensure sample protection by guaranteeing fast recovery and pull-down back to -80 °C.

- > Space for up to 32,000 vessels (1.5 mL) for your daily sample storage, combined with efficient pull-down and recovery times
- > Green cooling and low power consumption for high levels of sustainability
- > Technical data based on external test house evaluation for independent validation

#### **User-friendly**

- > Easy-to-use interface at eye-level for fast and convenient adjustments
- > Automatic vent port on the front of the door for quick re-access to samples
- > Easy access to filter enables regular cleaning, resulting in better performance
- > Flexible shelf positions for customizable setup

#### Need a reliable storage partner?

- > Up to 320 boxes, organized in 20 racks for easy sample retrieval
- > Heavy duty shelves for loads up to 50.5 kg (111.3 lbs)
- > To customize your rack selections, please check the rack configuration tool at:

#### https://econfig.bio-itech.de

- > Stainless steel chamber for easy cleaning
- > Robust, powder-coated outer housing

#### Keep your samples safe

- > Short pull-down times to -80°C and fast door opening recovery for safe return to -80°C
- > Efficient and reliable 2-stage compressor system
- > Internal temperature probe located in middle compartment for reliable measurement
- > Long warm-up times for increased sample safety with 130 mm walls containing polyurethane foam and vacuum insulation panels\*

\*CryoCube F440h







## Digitize Your Lab

## Remember Your Last 2 a.m. Wake-up Call?

Explore the VisioNize® Lab Suite

VisioNize Lab Suite is your software solution for effective monitoring and maintenance management to prevent samp storage emergencies. Gain access to a modular range of services and choose what is needed in your lab. These servi integrate seamlessly to support you and your lab – with futu updates for a sustainable investment. As you and your lab expand over time, VisioNize Lab Suite will evolve as well to meet your needs.

Benefit from 24/7 notification & monitoring for your UI freezers and high-value stored samples.



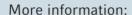
#### VisioNize box

- > Connect your Eppendorf devices to the VisioNize Lab Suite for optimal monitoring
- > The hardware hub works as a data decoding and translation system enabling the collection of device data in **VisioNize Lab Suite**



#### VisioNize sense

- > Independent temperature measurement for Eppendorf and non-Eppendorf freezers
- > Monitor your device and lab environment in VisioNize Lab Suite



www.eppendorf.com/VisioNize





## Lost in Samples? Stay Organized!

Over many years, scientists collect thousands of samples – samples that are the results of years of hard work, samples of high value. Keep track of your samples with eLabInventory®, the sample management software:

- > Intuitive user interface for easy handling
- > Compatible with Eppendorf SafeCode System
- > Track and tracing for audit trail, GLP compliant
- > 21 CFR part 11 compliance for documentation security

Start a free 30-day trial! Visit www.eLabInventory.com/eppendorf





## CryoCube® F440 Series

Features	CryoCube F440n	CryoCube F440h
LCD with softkey inputs		
Access code		
Green cooling by hydrocarbons		
Green insulation foam		
Vacuum insulation panels	_	
Air-cooled		

### Our Part for Sustainability

- > 100% renewable power usage in our production
- > Environmentally-friendly insulation with green foam, vacuum insulation panels (F440h), and insulated inner doors for energy efficient storage



- > 5 compartments with 5 inner doors for safe and reliable sample storage
- > 130 mm thick walls for long warm-up times
- > Green cooling liquids (Hydrocarbons: R170/ R290) with very low global warming potential (GWP) for compliance with the European F-Gas regulation and US SNAP regulation
- > Low energy consumption combined with efficient cooling performanceand long lifespan from Eppendorf ULT freezers that you can rely on
- > Experience at Eppendorf with green cooling liquids for -80 °C applications in R&D, production, logistics, and service in the field since 2008

#### Partnering with:







## Ergonomics – comfort for you

- > Convenient door handle based on Eppendorf PhysioCare Concept® for easy opening and closing of outer door
- > Automatic vent port for fast re-entry
- > Display with all relevant information at eye level
- > Up to two independent and easily accessible locking systems for increased security



More information:

www.eppendorf.com/PhysioCare







Typical Performance Characteristics*			
Model	CryoCube F440h	CryoCube F440n	
Insulation	Vacuum insulation paneling / polyurethane foam	Polyurethane foam	
Wall Thickness	Type C	Type A	
Capacity	440 L / 15.5 ft <sup>3</sup>	440 L / 15.5 ft <sup>3</sup>	
No. of internal doors	5	5	
No. of compartments	5	5	
Max. racks per freezer	20	20	
Box capacity per rack			
53 mm (2 in) tall boxes	16	16	
Sample capacity			
53 mm (2 in) tall boxes	32,000	32,000	
Box capacity per freezer			
53 mm (2 in) tall boxes	320	320	
76 mm (3 in) tall boxes	160	160	
102 mm (4 in) tall boxes	160	160	
Dimensions (W × D × H) <sup>1)2)3)</sup>	95.5 × 89.8 × 195 cm /	95.5 × 89.8 × 195 cm /	
	$37.6 \times 35.4 \times 76.8$ in	$37.6 \times 35.4 \times 76.8$ in	
Dimensions internal (W × D × H)	61.6 × 57.5 × 126.5 cm /	61.6 × 57.5 × 126.5 cm /	
	24.3 × 22.6 × 49.8 in	24.3 × 22.6 × 49.8 in	
Weight w/o accessories	286 kg / 631 lbs	267 kg / 589 lbs	
Shipping weight	327 kg / 721 lbs	308 kg / 679 lbs	
Pull-down time to -80 °C (230 V / 115 V)4)	3 h 20 min / 3 h	3 h 35 min / 3 h	
Recovery time to -80 °C (230 V / 115 V) <sup>5)</sup>	27 min / 21 min	36 min / 29 min	
Noise level	51.5 dB	51.5 dB	
Heat output (230 V)	283 W (964 BTU/h)	346 W (1,180 BTU/h)	
Power consumption	230 V: 4.8 KWh/day / 6.8 KWh/day	230 V: 5.7 KWh/day / 8.3 KWh/day	
Eppendorf freezer (-70 °C / -80 °C) <sup>6)</sup>	(0.31 KWh/ft <sup>3</sup> ) / (0.44 KWh/ft <sup>3</sup> )	(0.37 KWh/ft <sup>3</sup> ) / (0.65 KWh/ft <sup>3</sup> )	
	208 V: –	208 V: 5.6 KWh/day / 7.9 KWh/day	
	445.77.47.1040.7177.5.1040.71	(0.36 KWh/ft³) / (0.51 KWh/ft³)	
	115 V: 4.6 KWh/day / 6.5 KWh/day (0.30 KWh/ft³) / (0.42 KWh/ft³)	115 V: 5.9 KWh/day / 8.5 KWh/day	
I-4	<del></del> _	(0.38 KWh/ft³) / (0.55 KWh/ft³)	
Interior	Stainless steel	Stainless steel	
Exterior	Powder-coated steel	Powder-coated steel	
Password protection of setpoints	yes	yes	
Extras	Automatic vent port Integrated lock and padlock option	Automatic vent port Integrated lock and padlock option	
Cooling liquid	R290 / R170	R290 / R170	
		<del> </del>	
Connectivity	VisioNize box	VisioNize box	

<sup>\*</sup> Technical data based on external test house evaluation of 3 units for independent validation

<sup>1)</sup> Optional CO\_/LN<sub>3</sub> backup systems add 8.65 cm/3.5 in to height.

<sup>2)</sup> To allow for handling of door handle, add 80 mm to width of freezers.

<sup>3)</sup> Door open adds up to 15 cm to width.

<sup>4)</sup> Empty freezer with shelves fitted, pull down from 20 °C ambient conditions to -80 °C.

<sup>5)</sup> Empty freezer with shelves fitted, set point -80 °C, recovery back to -80 °C after 60 s opening.

<sup>6)</sup> Empty freezer with shelves fitted, set point -80 °C/-70 °C, 20 °C ambient conditions.



#### Freezer Ordering information

Model		Door Handle	Inner Compartments	Voltage*	Order No.
CryoCube® F440n Left	Left	5	115 V	F440200035	
			208 V	F440400035	
			230 V	F440300031	
CryoCube® F440h	Left	5	115 V	F440240035	
			230 V	F440340031	

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

#### Accessories Ordering Information

Description	Order no.
Freezer storage boxes	Please inquire online
Metal freezer racks, stainless steel, aluminum, drawer, & side-access available	Please inquire online
CO <sub>2</sub> and LN <sub>2</sub> back-up systems	Please inquire online
Chart recorder	Please inquire online
eLabInventory® Sample Management Software	Please inquire online
eLabJournal® Electronic Lab Notebook Software	Please inquire online
VisioNize® Lab Suite¹	Please inquire online
VisioNize® box, with mains/power adapter	1006 000 009
VisioNize® box adapter for freezers, CryoCube and Innova models	1006 075 009
VisioNize® box cable, Ethernet, length 5 m	1006 073 006
RS-485 interface kit for Premium/HEF/CryoCube® F440 series, except Innova® U360	F652 999 007

<sup>&</sup>lt;sup>1</sup> Important note: Depending on your country, VisioNize and the VisioNize services may not be available. You can check the Eppendorf eShop or contact your Eppendorf Sales representative for details.

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www.eppendorf.com/freezers