



# 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 sample storage emergencies. Gain access to a modular range of services and choose what is needed in your lab. These services integrate seamlessly to support you and your lab – with future 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 UL 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**

More information:  
[www.eppendorf.com/VisioNize](http://www.eppendorf.com/VisioNize)



## eLabInventory



## 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](http://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 performance and 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



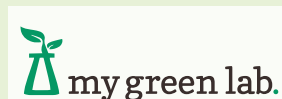
### Ergonomics – comfort for you

- > 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](http://www.eppendorf.com/PhysioCare)

### Partnering with:



&



> For more information on sustainable ULT Freezers, please visit:  
[www.eppendorf.com/sustainability](http://www.eppendorf.com/sustainability)





### 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 /<br>37.6 × 35.4 × 76.8 in                                                               | 95.5 × 89.8 × 195 cm /<br>37.6 × 35.4 × 76.8 in                                                                                                                                                    |
| Dimensions internal (W × D × H)                        | 61.6 × 57.5 × 126.5 cm /<br>24.3 × 22.6 × 49.8 in                                                             | 61.6 × 57.5 × 126.5 cm /<br>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) <sup>4)</sup> | 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<br>(0.31 KWh/ft <sup>3</sup> ) / (0.44 KWh/ft <sup>3</sup> )                 | 230 V: 5.7 KWh/day / 8.3 KWh/day<br>(0.37 KWh/ft <sup>3</sup> ) / (0.65 KWh/ft <sup>3</sup> )                                                                                                      |
| Eppendorf freezer (-70 °C / -80 °C) <sup>6)</sup>      | 208 V: –<br><br>115 V: 4.6 KWh/day / 6.5 KWh/day<br>(0.30 KWh/ft <sup>3</sup> ) / (0.42 KWh/ft <sup>3</sup> ) | 208 V: 5.6 KWh/day / 7.9 KWh/day<br>(0.36 KWh/ft <sup>3</sup> ) / (0.51 KWh/ft <sup>3</sup> )<br><br>115 V: 5.9 KWh/day / 8.5 KWh/day<br>(0.38 KWh/ft <sup>3</sup> ) / (0.55 KWh/ft <sup>3</sup> ) |
| Interior                                               | Stainless steel                                                                                               | Stainless steel                                                                                                                                                                                    |
| Exterior                                               | Powder-coated steel                                                                                           | Powder-coated steel                                                                                                                                                                                |
| Password protection of setpoints                       | yes                                                                                                           | yes                                                                                                                                                                                                |
| Extras                                                 | Automatic vent port<br>Integrated lock and padlock option                                                     | Automatic vent port<br>Integrated lock and padlock option                                                                                                                                          |
| Cooling liquid                                         | R290 / R170                                                                                                   | R290 / R170                                                                                                                                                                                        |
| Connectivity                                           | VisioNize box                                                                                                 | VisioNize box                                                                                                                                                                                      |

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

<sup>1)</sup> Optional CO<sub>2</sub>/LN<sub>2</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.  |
|------------------------------------------------------------------------------------------------------|-------------|--------------------|----------|------------|
| <br>CryoCube® F440n | Left        | 5                  | 115 V    | F440200035 |
|                                                                                                      |             |                    | 208 V    | F440400035 |
|                                                                                                      |             |                    | 230 V    | F440300031 |
| <br>CryoCube® F440h | Left        | 5                  | 115 V    | F440240035 |
|                                                                                                      |             |                    | 230 V    | F440340031 |

\*230 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 Suite <sup>1</sup>                                               | 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>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.

Your local distributor: [www.eppendorf.com/contact](http://www.eppendorf.com/contact)  
 Eppendorf AG · Barkhausenweg 1 · 22339 Hamburg · Germany  
[eppendorf@eppendorf.com](mailto:eppendorf@eppendorf.com) · [www.eppendorf.com](http://www.eppendorf.com)

[www.eppendorf.com/freezers](http://www.eppendorf.com/freezers)