

10 Technical data

10.1 Power supply

Mains/power supply voltage and frequency	CryoCube F570n	230 V, 50 Hz 115 V, 60 Hz 208 V – 230 V, 60 Hz
	CryoCube F570h	230 V, 50 Hz 115 V, 60 Hz
	CryoCube F570hw	230 V, 50 Hz
Current consumption	CryoCube F570n	230 V (50 Hz) 7.5 A 115 V (60 Hz) 11.5 A 208 V (60 Hz) 7.5 A
	CryoCube F570h	230 V (50 Hz) 7.5 A 115 V (60 Hz) 11.5 A
	CryoCube F570hw	230 V (50 Hz) 7.5 A
Electromagnetic compatibility (EMC)	The device meets the following requirements: • IEC/EN 61326-1 • EN 55011 (CISPR 11) • FCC Part 15 – Class A	
Overvoltage category	II	
Degree of pollution	2	

10.2 Ambient conditions

10.2.1 Operation

Ambience	For indoor use only
Ambient temperature	15 °C – 32 °C
Relative humidity	Maximum 80 %, non-condensing
Atmospheric pressure	80 kPa – 106 kPa

Technical data

CryoCube F570n, F570h, F570hw
English (EN)

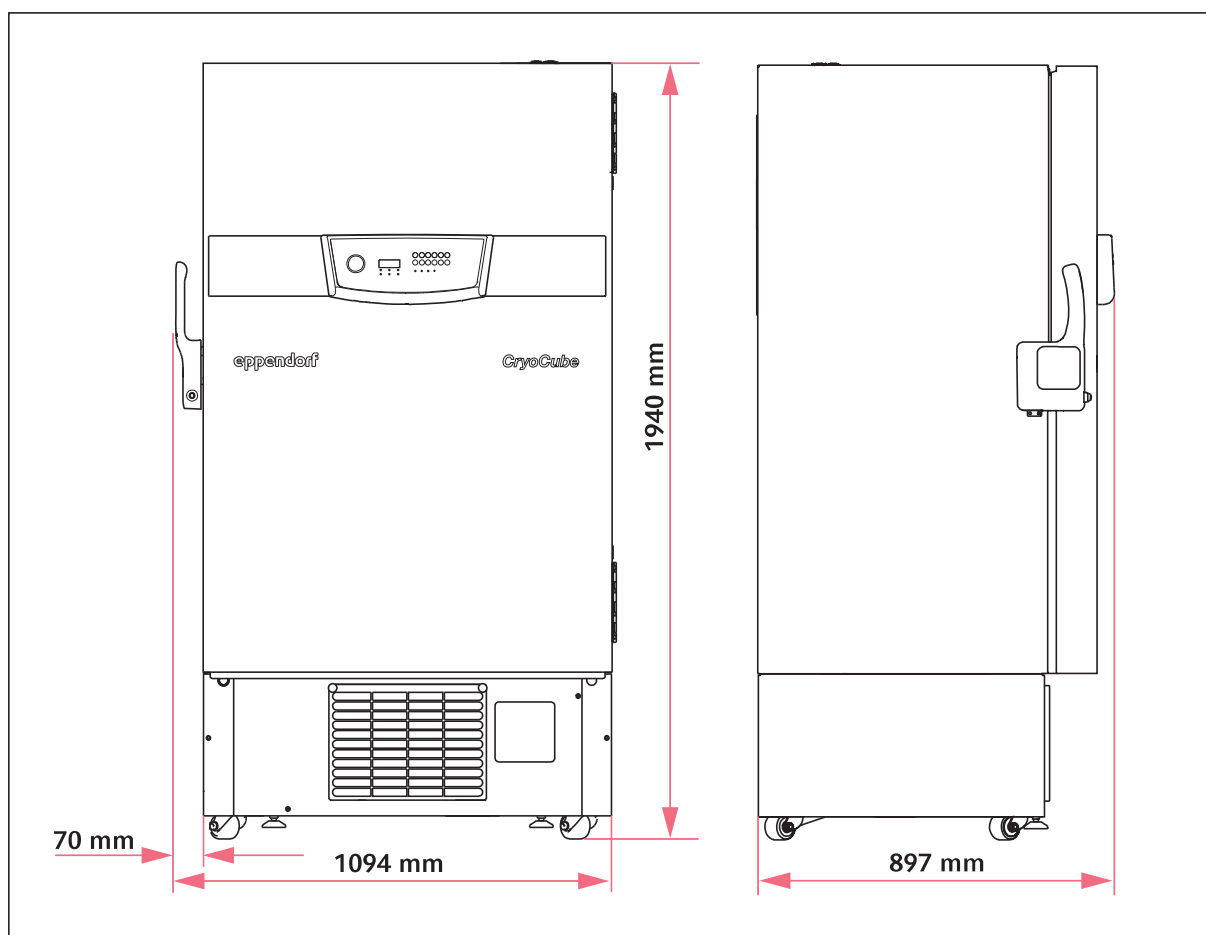
10.3 Dimensions**10.3.1 External dimensions**

Fig. 10-1: External dimensions CryoCube F570n, CryoCube F570h and CryoCube F570hw

10.3.2 Internal dimensions

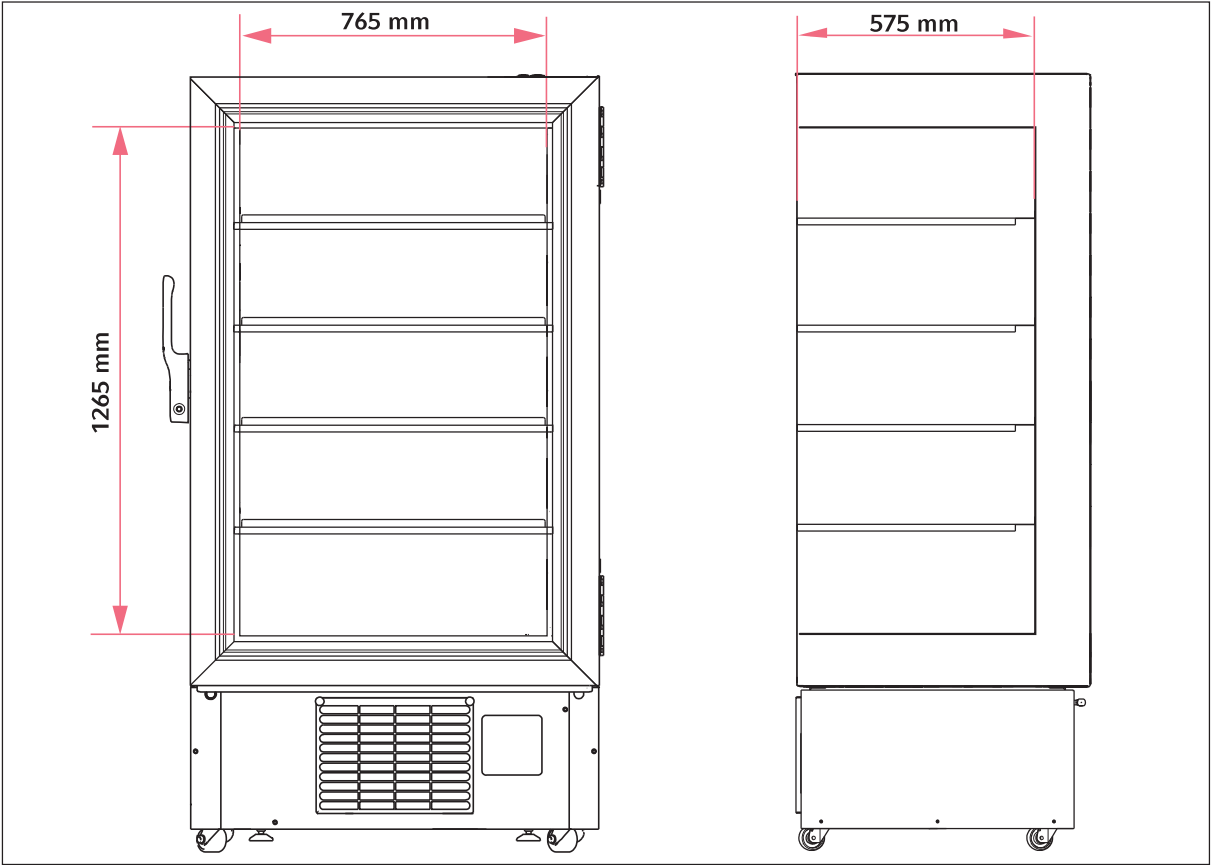


Fig. 10-2: Internal dimensions CryoCube F570n, CryoCube F570h and CryoCube F570hw

10.4 Weight

	Device	Packaged device
CryoCube F570n	281 kg	328 kg
CryoCube F570h	341 kg	388 kg
CryoCube F570hw	341 kg	388 kg

10.5 Interfaces

BMS	Remote alarm
Serial interface	RS-485 (for internal use)

Only devices which meet the requirements of IEC 60950 (UL 60590) standards may be connected to the interface.

Technical data

CryoCube F570n, F570h, F570hw
English (EN)

10.6 Cooling water supply**10.6.1 Device connection**

Connection for water inlet and water outlet	Whitworth pipe thread 15 mm × 12.7 mm (1/2" BSP) acc. to DIN 2999
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10.6.2 Building connection

Pressure at the water inlet	100 kPa – 1000 kPa
Minimum pressure difference between water inlet and water outlet	50 Pa
Nominal cooling water supply volume flow rate	3.8 L/min
Connection for water inlet and water outlet	alternately 1/2" screw thread, 3/4" screw thread or bayonet coupling

10.6.3 Cooling water

Temperature at the water inlet	7 °C – 25 °C
Cooling water quality	Clean Free from particles that could obstruct the flow through the valve or the heat exchanger.

10.6.4 Cooling water hose

Cooling water hoses are not included in the delivery package. Cooling water hoses and connecting elements are not available from Eppendorf AG and must be procured separately.

Pressure resistance	1000 kPa
Temperature resistance	30 °C or 35 °C
Length	Distance from the building connection to the floor + 1 m
	To reduce microbial growth and deposits, use oxygen-tight hoses.

10.6.5 Water filter

If well water is used, mount the water filter in front of the device's water inlet.

Mesh size	0.25 mm (60 mesh)
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10.7 Temperature control

10.7.1 Temperature range

Setting range	-50 °C to -86 °C
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10.7.2 Cooling of the refrigeration cycle

CryoCube F570n CryoCube F570h	Air cooling
CryoCube F570hw	Water cooling

10.7.3 Refrigerant

Device	Refrigeration cycle 1	Refrigeration cycle 2
CryoCube F570n (115 V)	R-290	R-170
CryoCube F570n(208 V)	R-290	R-170
CryoCube F570n (230 V)	R-290	R-170
CryoCube F570h (115 V)	R-290	R-170
CryoCube F570h (230 V)	R-290	R-170
CryoCube F570hw (230 V)	R-290	R-170

Refrigerant	Compounds
R-170	Ethane
R-290	Propane

10.8 Additional specifications

10.8.1 Capacity

CryoCube F570n CryoCube F570h CryoCube F570hw	570 L
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10.8.2 Material

Outer door insulation	Vacuum insulation panels (only CryoCube F570h) Polyurethane foam
Device insulation	Vacuum insulation panels (only CryoCube F570h) Polyurethane foam
Interior	Stainless steel (304 2B)