

# ULT-Freezer Performance Data Sheet



## Capacity

Storage volume	740 L (26.1 ft <sup>3</sup> )
Number of compartments	3 / 5
Racks per shelf	6
Racks per freezer	18 / 30
Box capacity	50 mm (2 in) box 576 / 528 75 mm (3 in) box 360 / 288 100 mm (4 in) box 288 / 264
Sample capacity	50 mm (2 in) box 57,600 / 52,800
Temperature rating	-50 °C to -86 °C

## Technical Specifications: CryoCube® F740 – Air-Cooled (230 V)

Intended use	<ul style="list-style-type: none"> <li>&gt; Cold storage of standard laboratory materials</li> <li>&gt; Indoor use only, between 15 and 32 °C</li> <li>&gt; Altitude up to 2000 m</li> <li>&gt; Non-corrosive, non-flammable, non-explosive environment</li> </ul>
Environmental conditions	<ul style="list-style-type: none"> <li>&gt; Good air ventilation required</li> <li>&gt; Maximum relative humidity 80 % for temperatures up to 31 °C</li> <li>&gt; No mains/power supply voltage fluctuations</li> </ul>
Electrical rating (1 phase)	230 V/50 Hz
Current rating	6.0 A
Agency listing	<ul style="list-style-type: none"> <li>&gt; WEEE</li> <li>&gt; ROHS</li> <li>&gt; REACH</li> <li>&gt; All components tested to CE specifications</li> </ul>

## Dimensions

Internal dimensions (H x W x D)	1390 x 865 x 621 mm (54.7 x 34.1 x 22.6 in)
External dimensions* (H x W x D)	1973 x 1099 x 915 mm (77.7 x 43.3 x 36.0 in)
External packaging dimensions (H x W x D)	2225 x 1200 x 1045 mm (87.6 x 47.2 x 41.1 in)
Net weight	308 kg (679 lbs) / 317 kg (699 lbs)
Shipping weight	357 kg (787 lbs) / 366 kg (807 lbs)

\*To allow for handles and hinges, add 80 mm to width.

## User Interface

Alarms	Adjustable high/low temperature, power fail, battery low, filter clean, fault
Password protection (freezer settings)	Yes
Remote alarm port	Standard
RS-485 interface	Standard
Ethernet	Standard
Lock	Specific / manual
Temperature control	Microprocessor
Cabinet control probe	PT 100

## Refrigeration System Specifications

Refrigeration system	2 stage cascade cooling system
Compressors	Commercially available, heavy duty compressors
Defrost method	Manual
Refrigerant charge	High stage: R404a Low stage: R508b
Condensing method	Air-cooled
Expansion device	Capillary tubes
Evaporator type	Cold wall

## Construction

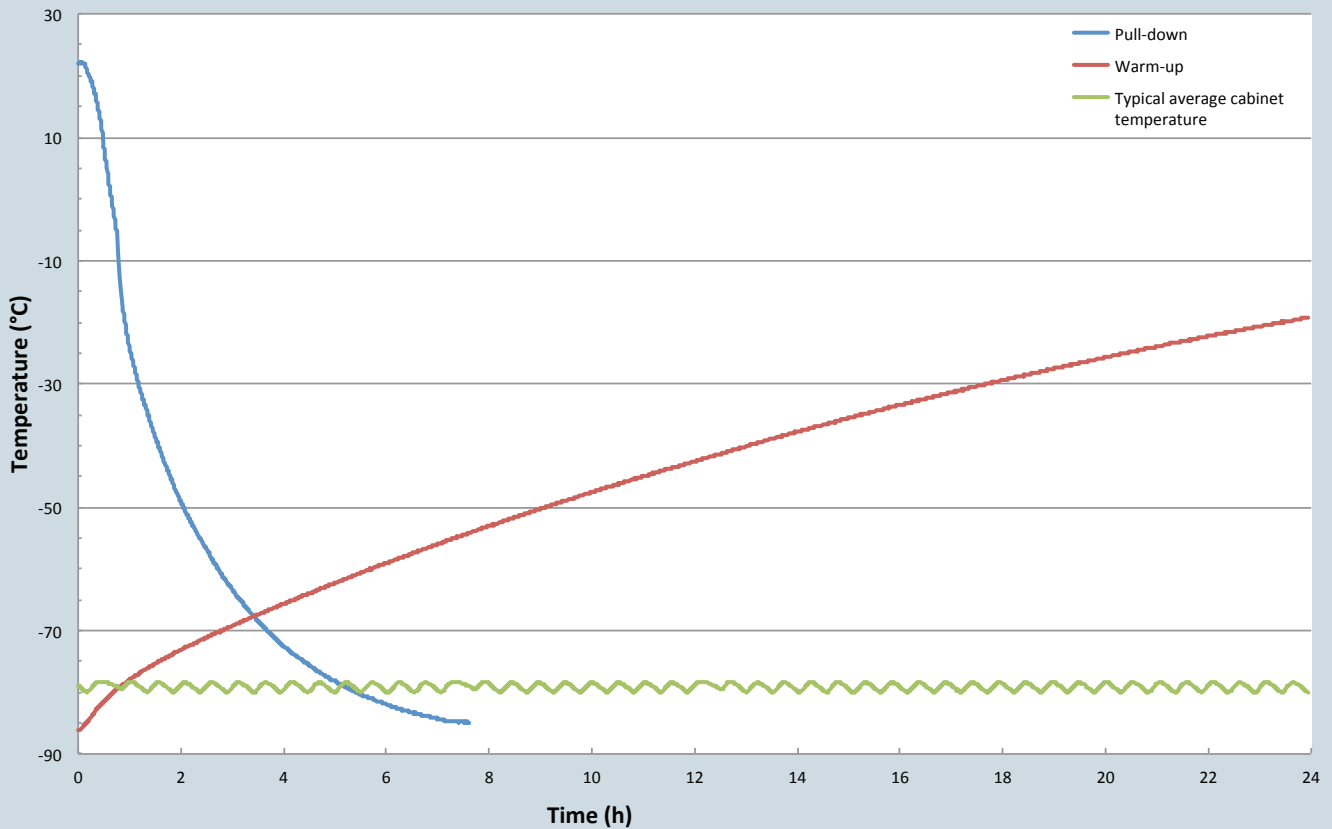
Interior	Stainless steel grade 304 2B
Exterior	Powder-coated steel
Insulation	Vacuum insulation panels (body) and polyurethane foam
Power switch	Secured
Inner doors	Insulated and sealed
Casters/level legs	Heavy duty (250 kg each)

## Typical Performance Characteristics at 20 °C +/- 1 (Ambient Temperature)

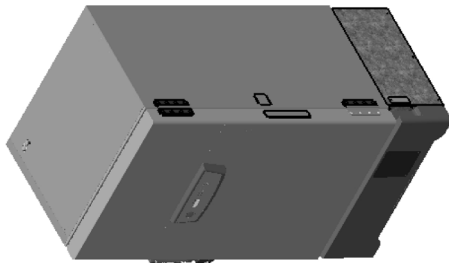
Pull down time (freezer empty, from ambient to -80 °C)	5 h			
Power consumption (freezer set to -80 °C/-70 °C)	12.9 kWh/day / 9.6 kWh/day			
Cabinet uniformity <sup>1</sup> (freezer set to -80 °C)	+3.4 °C/-0.1 °C			
Max. heat output (freezer set to -80 °C/-70 °C)	538 W/400 W (1836 BTU/h / 1365 BTU/h)			
Warm up time (freezer 2/3 full, from -85 °C to 0 °C)	42 h			
Noise level (at -80 °C)	47.8 dB			
Door open recovery (freezer set to -80 °C)	120 s	60 s	30 s	15 s
	43 min	30 min	23 min	15 min
Duty cycle (on/off)	20/10 min			
Electric/mains	6.0 A			

<sup>1</sup>Average multiple probe temperature deviation

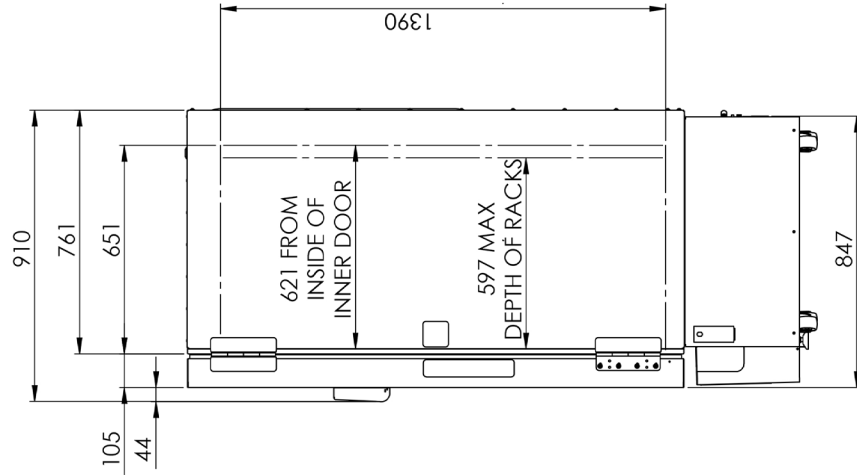
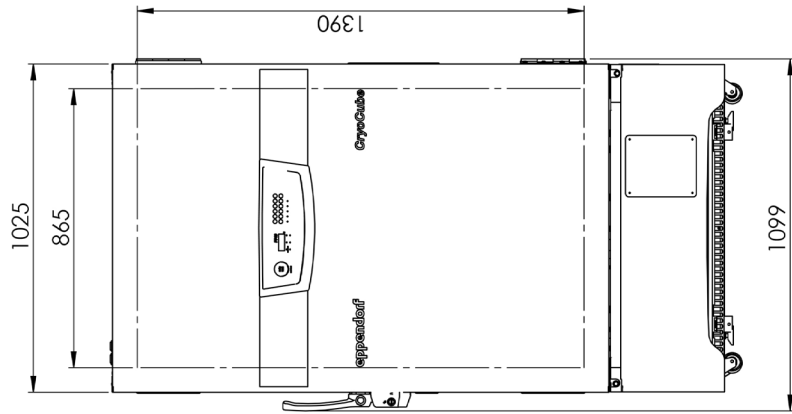
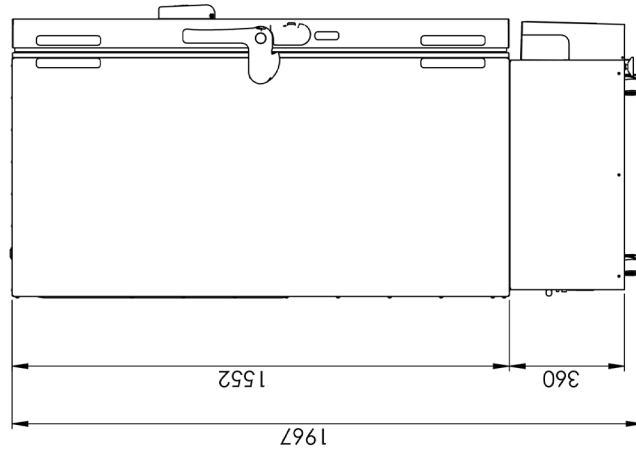
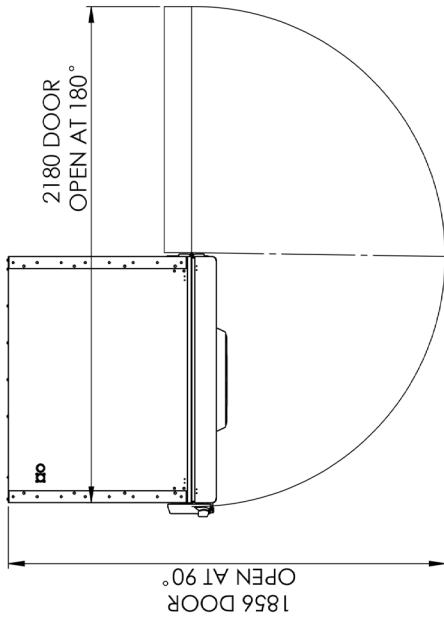
### CryoCube F740 230 V/50 Hz Performance Graph



Technical specifications subject to change



ISOMETRIC VIEW  
SCALE 1:25



DRAWN	K.H	Scale	1:15	EPPENDORF CRYOTECH LTD		MATERIAL	Title		cont
Checked	SPC	ALL DIMENSIONS IN MILLIMETRES		TOLLERANCES -	GEN -	FINISH	F740 OUTLINE		SHEET
				HOLE	CTRS -		Drawing No		1 OF 2
							D1037		

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The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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