



MDF-U5412H-PE

Biomedical ECO

-40°C Plasma Freezer

482 L





Cost-saving and environmentally friendly fresh frozen plasma storage Biomedical ECO -40°C Plasma Freezers with natural refrigerants minimise energy consumption, reduce environmental impact and save money. Certified as Class IIa Medical Device, these freezers provide secure storage of valuable research and clinical samples.

Efficient Refrigeration

Naturally occurring hydrocarbon (HC) refrigerants provide more efficient cooling due to their high latent heat of evaporation. As well as improved performance this leads to reduced power consumption and energy

Uniform Temperature Design

A microprocessor controller ensures precise storage temperatures regardless of ambient conditions.
Temperature uniformity is enhanced through direct cooling tubes under each shelf

Ease of Use & Intelligent Security

A comprehensive visual and audible alarm system with remote alarm contacts ensures users are aware of any abnormalities and can take appropriate actions. Storage containers are supplied as standard for increased convenience.



Reduced Running Costs

Efficient refrigerants decrease power consumption for lower running costs and reduced air conditioning requirements.



Uniform Sample Storage

Precise and uniform temperatures provide an ideal freezing environment for Fresh Frozen Plasma for transfusions.



Secure Storage

Safety features and an easy-touse design ensure unsurpassed reliability for effective storage of blood products.

BIOMEDICAL ECO -40°C Plasma Freezer

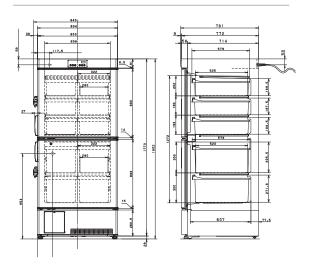


Stable & Uniform Temperature Design

The MDF-U5412H features a direct cooling system for uniform temperature control and has cooling tubes under every shelf. The Manual defrost ensures a stable environment with no large temperature peaks. This unit features full-height storage containers on each shelf and has double outer doors.

Reliable Sample Security

A comprehensive self-diagnostic system and visual and audible alarm system with remote alarm contacts ensures users are aware of any abnormalities and can take appropriate actions to ensure the safety of previous samples. The double doors come with a key lock as standard and provision for an additional padlock to be added (padlock not provided) for extra security. An access port allows external temperature monitoring with the use of a probe, or an optional temperature chart recorder can be added.



Model Number		MDF-U5412H-PE
External dimensions (W x D x H) ¹⁾	mm	804 x 772 x 1802
Internal dimensions (W x D x H)	mm	658 x 607 x 1272
Volume	litres	482
Net weight	kg	132
Capacity	FFP packs	280 (300ml)
Performance		
Cooling performance 2)	°C	-40
Temperature setting range	°C	-18 to -45
Temperature control range 21	°C	-20 to -40
Control		
Controller		Microprocessor, non-volatile memory
Display		LED
Temperature sensor		Thermistor
Refrigeration		
Refrigeration system		Direct
Compressors	W	450
Refrigerant		HC
Insulation material		PUF
Insulation thickness	mm	70
Construction		
Exterior material		Painted Steel
Interior material		Styrol resin
Outer door	qty	2
Outer door lock	17	Υ
Inner doors	qty	-
Shelves	qty	4
Max. load - per shelf	kg	30
Max. load - total	kg	100
Access port	qty	1
- position	17	Back
- diameter	Ø mm	30
Casters	qty	4 (2 leveling feet)
Alarms		note Alarm, V = Visual Alarm, B = Buzzer Alarm)
Power failure		V-B-R
High temperature		V-B-R
Low temperature		V-B-R
Door open		V-B
Electrical and noise level		
Power supply	V	230
Frequency	Hz	50
Noise level ⁴⁾	dB [A]	42
Options		
Temperature recorders		
- Circular type		MTR-G85C-PE
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Continuous strip type		MTR-4015LH-PE
- Chart paper		RP-40-PW
- Ink pen		
- Recorder housing		MPR-S30-PW
3		1

Appearance and specifications are subject to change without notice.



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The MDF-U5412H-PE is certified as a Class IIa Medical Device [93/42/EEC and 2007/47/EG] 101 medical purposes of storing at low temperature of plasma and DNA.

¹⁾ Exterior dimensions of main cabinet only, excluding handle and other external projections - See dimensions drawings on website for full details.

**Air temperature measured at freezer centre, ambient temperature +30°C, no load.

³⁾ Freezer set point -40°C, ambient temperature 23°C.

unloaded, 230V 50Hz power supply

Nominal value - Background noise 20dB[A].