



MDF-U443-PE

Biomedical

-40°C Plasma Freezer

426 L



The ideal freezing environment for the preservation of fresh frozen plasma

The Biomedical -40°C Plasma Freezers are certified as Class Ila Medical Device. These freezers provide secure storage of valuable research- and clinical samples.

Effective Temperature Control

Microprocessor controls ensure that the set temperature is maintained regardless of ambient conditions. With a temperature range that can be set anywhere between -15°C to -44°C.

Stable & Uniform Temperature Design

Temperature uniformity throughout the freezer ensures that all samples can be stored in identical conditions. The forced Air Circulation technology quickly restores temperature uniformity following routine door openings.

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.



Uniform Sample Storage

Quality of design and manufacture ensures trusted and reliable storage that maintains the integrity of precious samples.



Stable Environment

The environment that is unaffected by fluctuations in ambient temperature ensuring stable conditions and a stable environment for storage of plasma and DNA.



Safe & Secure Storage

Multiple safety systems such as high/low temperature audible and visual alarms, remote alarm, door open alarm and keyed door locks.

VIP -40°C Freezers



Easy to read digital display

Temperature readings are displayed and controlled in the range of -15°C to -44°C.

Forced Air Circulation Technology

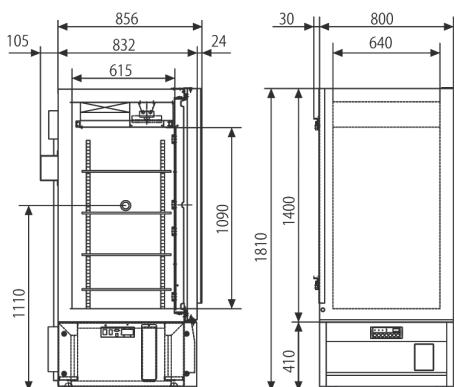
Temperature uniformity throughout the freezer ensures that all samples can be stored in identical conditions. The Forced Air Circulation technology quickly restores temperature uniformity following routine door openings. Coupled with fast-response microprocessor temperature control this ensures a stable environment for precious samples. Two acrylic resin inner doors reduce the loss of cold air when opening the outer door.

Automatic Compressor Cycling

Compressor ON - OFF cycles are regulated automatically in response to cooling demand to minimise compressor running time and to save energy.

Audible and flashing LED Visual alarms

Audible and flashing LED visual alarms with remote alarm contacts are in place in case of power failure, high or low temperature condition, or during any



The MDF-U443-PE is certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC) for medical purposes of storing at low temperature of plasma and DNA.



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Model Number		MDF-U443-PE
External Dimensions [W x D x H] ¹⁾	mm	800 x 832 x 1810
Internal Dimensions [W x D x H]	mm	640 x 615 x 1090
Volume	litres	426, 300 FFP packs (300 ml)
Net Weight	kg	213
Capacity	2" boxes	256
Performance		
Cooling performance ²⁾	°C	-40
Temperature setting range	°C	-15 to -44
Temperature control range ²⁾	°C	-15 to -40
Control		
Controller		Microprocessor, non-volatile memory
Display		LED
Temperature sensor		Thermistor
Refrigeration		
Refrigeration system		Cascade + forced air circulation
Compressors	W	H:400/L:750
Refrigerant		HFC
Insulation material		PUF / VIP PLUS
Insulation thickness	mm	70
Construction		
Exterior Material		Painted Steel
Interior Material		Stainless Steel
Outer Door	qty	1
Outer Door Lock		Y
Shelves	qty	5
Containers/baskets	kg	-
Max. load - per shelf/container/basket	kg	50
Max. load - total	kg	200
Access port	qty	1
Access Port Position		Left
Access Port Diameter	Ø mm	40
Interior fluorescent lamp		Y
Casters	qty	4 (2 leveling feet)
Alarms		
(R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)		
Power Failure		V-B-R
High Temperature		V-B-R
Low Temperature		V-B-R
Filter		V-B
Door open		V-B
Electrical and Noise Level		
Power Supply		230V 50Hz single phase
Noise Level ⁵⁾	dB [A]	51
Options		
Storage systems		
Temperature recorders		
- Circular type		
- Chart paper		
- Ink pen		
- Recorder housing		
- Continuous strip type		MTR-4015LH-PE (-40 to +14 °C range) or MTR-85H (-100 to +50 °C range)
- Chart paper		RP-40-PW ⁶⁾ or RP-G85-PW ⁷⁾
- Ink pen		DF-38FP-PW ⁸⁾
- Recorder housing		MPR-S30-PW ⁹⁾

Appearance and specifications are subject to change without notice.

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

²⁾ Air temperature measured at freezer centre, ambient temperature +35°C, no load.

⁴⁾ Remote alarm comes with optional power failure alarm MPR-48B1-PW

⁵⁾ Nominal value - Background noise 20dB[A].

⁶⁾ Requires MPR-48B1-PW

⁷⁾ Defrost method: Cyclical defrost [Ref/Manual(Frz)]

⁸⁾ For use with MTR-4015LH-PE

⁹⁾ For use with MTR-85H-PW