



MDF-MU500H-PE

Biomedical ECO

-30°C Freezers

482 L



Same level of reliability with even better performance and efficiency

Biomedical ECO -30°C Freezers have natural refrigerants and Inverter Compressors and, therefore, minimise energy consumption, reduce environmental impact and save money on running costs.

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 costs.

Inverter Technology

Biomedical ECO -30°C Freezers utilize Inverter Compressors that can run at different speeds to maximise cooling performance under different conditions, while reducing the energy consumption of the freezer.

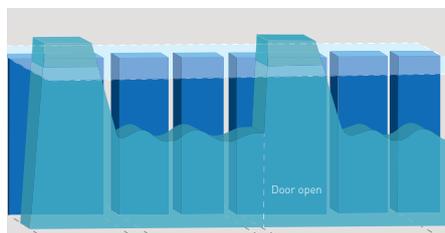
User Friendly Design

Multi-function control panel features an integrated alarm system, self diagnostic functions and a clear display of current temperature. 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.



Stable Temperatures

Inverter compressors turn on and off less frequently for optimum stability. Ideal for samples that are highly sensitive to temperature fluctuations.



Sample Security

Effective storage of biomedical, research and laboratory samples. Safety features and an easy-to-use design ensure unsurpassed reliability and functionality.

BIOMEDICAL ECO -30°C Freezer

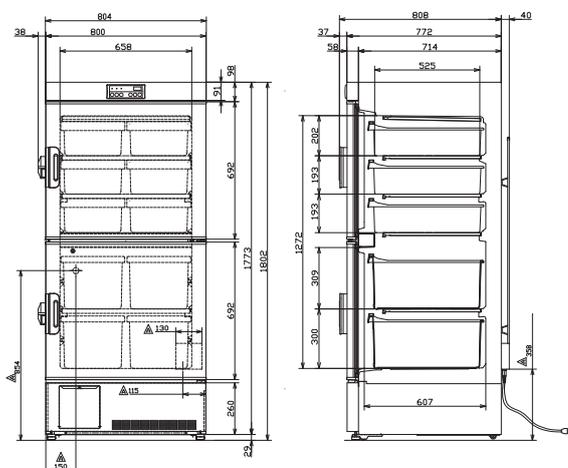


Inverter Compressors

While conventional freezers use single speed compressors which cycle on and off, **Biomedical ECO** Freezers contain inverter compressors that can run at different speeds to maximise cooling performance under different conditions. As the compressor is not cycling on and off as frequently the temperature uniformity of the freezer is significantly improved. Inverter compressors have the added advantage of reducing the energy consumption of the freezer which is not only better for the environment but also helps to reduce running costs.

Integrated Control Centre

The microprocessor control system is secure, easy to use and comprehensive and can be accessed through a front mounted control panel. The microprocessor has a memory back-up so after a power failure, operation resumes at pre-outage settings. The self diagnostics function will display an error code in the case of an abnormality.



Model Number		MDF-MU500H-PE
External Dimensions (W x D x H) ¹⁾	mm	800 x 772 x 1802
Internal Dimensions (W x D x H)	mm	658 x 607 x 1272
Volume	litres	482
Net Weight	kg	124
Capacity	2" boxes	224
Performance		
Cooling performance ²⁾	°C	-30
Temperature setting range	°C	-18 to -35
Temperature control range ²⁾	°C	-20 to -30
Control		
Controller		Microprocessor, non-volatile memory
Display		LED
Temperature sensor		Thermistor
Refrigeration		
Refrigeration system		Direct
Compressors	W	250 (inverter control)
Refrigerant		HC
Insulation material		PUF
Insulation thickness	mm	70
Construction		
Exterior Material		Painted Steel
Interior Material		ABS resin
Outer Door	qty	2
Outer Door Lock		Y
Shelves	qty	4
Containers / baskets	(L/M/S)	4/6/0
Max. load - per shelf / container/basket	kg	30
Max. load - total	kg	80
Access Port	qty	1
Access Port Position		Back
Access Port Diameter	Ø mm	30
Casters	qty	4 (2 leveling feet)
Alarms (R = Remote Alarm, V = Visual Alarm, B = Buzzer Alarm)		
Power Failure		V-B-R (Optional)
High Temperature		V-B-(R ⁴⁾)
Low Temperature		V-B-(R ⁴⁾)
Electrical and Noise Level		
Power Supply	V	230
Frequency	Hz	50
Noise Level ³⁾	dB [A]	40
Options		
Temperature recorders		
- Circular type		MTR-G85C-PE
- Chart paper		RP-G85-PW
- Ink pen		PG-R-PW
- Recorder housing		MPR-S740T-PW
- Continuous strip type		MTR-4015LH-PE
- Chart paper		RP-40-PW
- Ink pen		-
- Recorder housing		-
External mounting power failure alarm		MPR-48B1-PE

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 +30°C, no load.

³⁾ Nominal value - Background noise 20dB[A].

⁴⁾ Requires MPR-48B1-PW



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