

Biomedical

-30°C Chest Freezer

138 | 221 | 425 L



MDF-237-PE



Power to counteract frequent door openings Biomedical Chest Freezers offer outstanding reliability and performance, as required in a wide variety of storage- and research applications.

Precise & Uniform Storage

Precise and uniform storage temperatures regardless of ambient conditions through microprocessor temperature control.

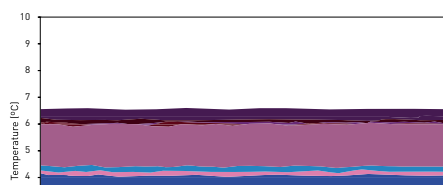
Stable Temperature Control

Manual defrost provides stable temperature control and does not exhibit transient temperature.

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.

MPR-721-PE Temperature Variation 24 hr Temperature Mapping (Unloaded)
Refrigerator Set at 5°C



Outstanding reliability and performance

The outstanding reliability and performance provided are ideal in a wide variety of storage and research applications.



Effective storage

In the medical field they provide effective storage of life-saving blood supplies and vaccines, as well as samples for diagnosis.



Valuable Sample Storage

An ideal storage solution with door lock (key included) for valuable samples.

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MDF-437-PE

Easy to read digital display

Temperature readings are displayed and controlled in the range of -20°C to -30°C.

Direct Cooling System

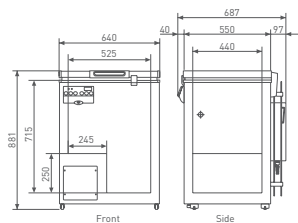
The Biomedical -30°C Chest Freezers feature a direct cooling system for uniform temperature control. Manual defrost ensures a stable environment with no large temperature peaks.

Visual LED Alarm Alerts

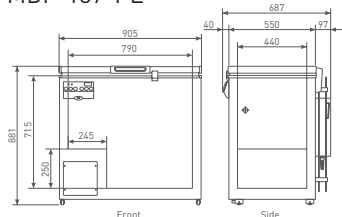
Audible and flashing LED visual alarms alert users to the unlikely event of either a high or low temperature condition to protect stored products.

Microprocessor Control

Managed and monitored by an integrated microprocessor controller with a comprehensive alarm system and diagnostic functions.



MDF-137-PE



MDF-237-PE

MDF-437-PE



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Model Number		MDF-137-PE*	MDF-237-PE*	MDF-437-PE*	
Dimensions					
External Dimensions (W x D x H) ¹⁾	mm	640 x 687 x 881	905 x 687 x 881	1265 x 807 x 902	
Internal Dimensions (W x D x H)	mm	525 x 440 x 715	790 x 440 x 715	1140 x 550 x 733	
Volume	litres	138	221	425	
Capacity	2" boxes	51	111	201	
Net weight (approx)	kg	52	60	81	
Performance					
Cooling performance ²⁾	°C	-30			
Temperature setting range	°C	-18 ~ -35			
Temperature control range ²⁾	°C	-20 ~ -30			
Control					
Controller		Microprocessor			
Display		LED			
Temperature sensor		Thermistor			
Refrigeration					
Cooling method		Direct			
Compressor	W	150	200	250	
Refrigerant		R-134a	R-134a	R-404A	
Refrigerant weight	g	160	175	340	
GWP of refrigerant for each cooling circuit		1430	1430	3922	
Total Refrigerant weight (CO ₂ equivalent)	ton	0.229	0.250	1.333	
Insulation material		PUF			
Insulation thickness	mm	55	55	60	
Construction					
Exterior Material		Painted Steel			
Interior Material		Coloured aluminium			
Outer lid	qty	1			
Outer lid lock		Y			
Containers / baskets	qty	2	3	4	
Max. load per container / basket	kg	10			
Max. load - total	kg	50	80	110	
Access port	qty	2			
- position		Right / bottom left			
- diameter	Ø mm	17			
Casters	qty	4 [2 levelling 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			
Electrical and Noise Level					
Power Supply	V	230V 50Hz single phase			
Noise Level ³⁾	dB [A]	35	41	42	
Options					
Storage systems		MDF-13B2-PW, set of two baskets MDF-13B3-PW, set of three baskets		MDF-43B2-PW, set of two baskets, MDF-43B3-PW, set of three baskets	
Temperature recorders		set of three baskets			
- Circular type					MTR-G85C-PE
- Chart paper					RP-G85-PW
- Ink pen					PG-R-PW
- Recorder housing					MDF-S740-PW
- Continuous strip type					MTR-4015LH-PE
- Chart paper					RP-40-PW
- Recorder housing					MDF-S3040-PW

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
3) Nominal value - Background noise 20dB

* Complies with Art. 11, Annex III of F-Gas Regulation (EU) No 517/2014. Contains fluorinated greenhouse gases.