

# **Biomedical**

-30°C Chest Freezer

138 | 221 | 425 L



MDF-237-PE

Biomedical Chest Freezers offer outstanding reliability, stability and performance for a wide variety of storage applications. Available in three sizes to meet flexible storage needs and available space.

## Precise & Uniform Storage

A microprocessor controller ensures precise and uniform storage temperatures even under high ambient temperature

### Stable Temperature Control

Manual defrost ensures stable temperature control without transient temperature peaks associated with auto-defrost systems.

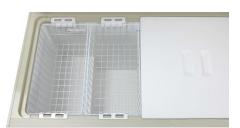
## User Friendly Design

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



#### Sample security

Safety features and an easy-touse design ensure unsurpassed reliability and functionality. An optional chart recorder can be fitted for temperature verification, or an access port is provided for additional monitoring probes.



#### **Effective storage**

Storage baskets for the top section are provided for increased convenience. Alternatively bespoke internal storage solutions for all types of samples can be provided.



#### Sample Storage

An ideal storage solution for all types of biomedical samples, reagents and kits with a lockable lid for increased security.

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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**

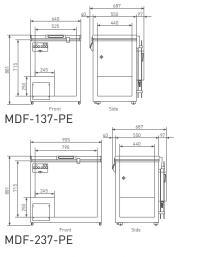
Biomedical -30°C Chest Freezers feature a direct cooling system for uniform temperature control. Manual defrost ensures a stable environment with no auto-defrost temperature peaks.

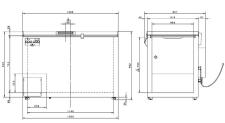
#### Visual LED Alarm Alerts

Audible and visual alarms alert users in 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-437-PE



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Model Number		MDF-137-PE	MDF-237-PE	MDF-437-PE
Dimensions				
External Dimensions	mm	640 x 687 x 881	905 x 687 x 881	1265 x 807 x 902
(W x D x H) <sup>1]</sup>	111111	U4U X 00/ X 00 l	/UJ X UO/ X 001	1200 X OU / X 7UZ
Internal Dimensions	mm	525 x 440 x 715	790 x 440 x 715	1140 x 550 x 733
(W x D x H)	11.	100	004	105
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 21	°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-449A
Refrigerant weight	g	160	175	300
Refrigerant GWP		1430	1430	1397
Total Refrigerant weight	t	0.229	0.250	0.419
(CO <sub>2</sub> equivalent)	,	V.LL,		3,
Insulation material			PUF	
Insulation thickness	mm	55	55	60
Construction				
Exterior Material			Painted Steel	
Interior Material		Painted aluminium		
Outer lid	qty	1		
Outer lid lock		Υ		
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 = Buzzei	r 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 <sup>3]</sup>	dB [A]	35	41	42
Options				
Storage systems			o baskets MDF-13B3-PW, ee baskets	MDF-43B2-PW, set of two baskets, MDF-43B3-PW, set of three baskets
Temperature recorders				1 222.80
- Circular type		MTR-G85C-PE		
- Chart paper		RP-G85-PW		
- Ink pen		PG-R-PW		
po		MDF-S740-PW		
- Recorder housing				
			MTR-//0151 H-PF	
- Recorder housing - Continuous strip type - Chart paper			MTR-4015LH-PE RP-40-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 for full details 2) Air temperature measured at freezer centre, ambient temperature +35°C, no load 3) Nominal value Background noise 2048

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