

# Preservation

sub-zero

## Biomedical Freezers

Panasonic Biomedical Freezers offer the outstanding reliability and performance required in a wide variety of storage and research applications.



MDF-137

# Chest type

Power to cope with frequent door openings



### Small size suitable for personal use

- Digital temperature display as standard feature
- Compact, personal size

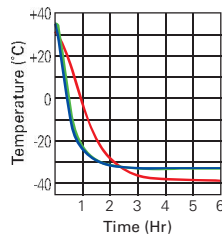
Effective capacity:  
**MDF-137** **138 liters**  
(4.9 cu.ft.)

Panasonic's MDF Series Biomedical Freezers offer the outstanding reliability and performance required in a wide variety of storage and research applications. In the medical field, they provide effective storage of life-saving fresh and frozen blood supplies and vaccines, as well as samples for diagnosis. In the biotechnology field, they provide effective storage of enzymes for genetic research, as well as culture media, reagents and samples for testing. In the industrial field, they are ideal for aging and temperature tests on electronic components, precision devices, and compound resins. As a storage environment, with excellent safety features, easy operability, and a host of other features, these freezers offer unsurpassed reliability and functionality. If you are looking for precision temperature controlled storage equipment, look to Panasonic.

### Performance Data

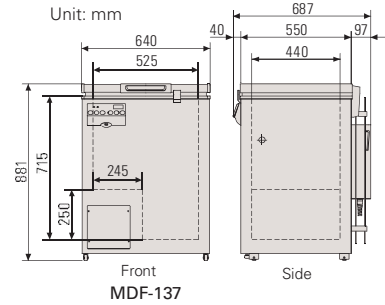
#### Pull-down characteristics under no-load condition

- MDF-137
- MDF-237
- MDF-436



### Dimensions

Unit: mm



## Features

### Enhanced Operation

- Front-mounted display/control panel (with microprocessor) located at convenient waist height



Photo is MDF-U537D

- Memory backup
- Temperature display
- Front access calibration for temperature recorder
- The control panel, alarm system and non-volatile memory are the same for all models in the series.

- Single electrical box makes servicing simpler.
- The chamber temperature is displayed for five seconds if BUZZER key is depressed during power failure alarm.
- After a power outage, operation resumes at pre-outage settings (non-volatile memory for temperature and alarm temperature settings)
- Control panel can be reset to zero for validation.
- Two access ports (right-hand side and bottom left) (chest type)
- Four casters and two adjustable feet

### Recording Features (Optional)

Recorder can be fitted in convenient position that will not interfere with installation. Choice of optional recorders

- 7-day circular recorder (MTR-G85C-PE) and 32-day strip recorder (MTR-4015LH-PE) are available. (except MDF-U443)
- Temperature recorder with auto recharging battery
- Front access calibration for temperature recorder

### Environment-Friendly

- HFC refrigerant (non-CFC, non-HCFC refrigerant) is environment-friendly but offers superb performance.
- Pre-coated metal body causes less environmental damage than conventional paint coating.

## Specifications

Model No.	MDF-137
Exterior dimensions (W x D x H)	640 x 687 x 881 (mm) 25.2 x 27.0 x 34.7 (inch)
Interior dimensions (W x D x H)	525 x 440 x 715 (mm) 20.7 x 17.3 x 28.1 (inch)
Capacity	138L (4.9 cu. ft.)
Cooling performance	-30°C (AT: 35°C, no load)
Control range	-20°C to -30°C
Baskets	2
Access ports	17mm diameter, right-hand side and bottom left
Compressor	Hermetic, 150W
Refrigerant	HFC
Alarm system	<ul style="list-style-type: none"> <li>• High/low temperature alarm (SV ±5°C to ±15°C adjustable) ficatio</li> <li>• Power failure • Remote alarm contact</li> <li>• Part replacement notification (MDF-U5312 only)</li> </ul>
Calibration	Zero adjustment via control panel
Options	Temperature recorder (MTR-G85C-PE/G85A-PA, MTR-4015LH-PE/PA),

## Options

### Storage Baskets



For MDF-137/237  
**MDF-13B2-PW** (set of two)  
**MDF-13B3-PW** (set of three)

Outer dimensions: 255(W) x 420(D) x 205(H)mm  
Inner dimensions: 210(W) x 370(D) x 200(H)mm



For MDF-436  
**MDF-43B2-PW** (set of two)  
**MDF-43B3-PW** (set of three)

Outer dimensions: 275(W) x 530(D) x 205(H)mm  
Inner dimensions: 230(W) x 480(D) x 200(H)mm

### Temperature Recorders



- MTR-G85C-PE** (except MDF-U443) -100°C to +40°C
- Mounting kit for chest: MDF-S740-PW
  - Mounting kit for MDF-U5312 and MDF-U537D (lower room): MPR-S7-PW
  - External mounting kit for MDF-U333 and MDF-U537D (upper room): MDF-S740T-PW
  - Recording paper: RP-G85-PW
  - Recording pen: PG-R-PW



**MTR-85H-PW**  
(for MDF-U443 only)  
-100°C to +50°C

- Recording paper: RP-85-PW
- Recording pen: DF-38FP-PW

### Panasonic DAQ system

Data acquisition software  
**MTR-5000-PW**/Ethernet (LAN)  
Interface **MTR-L03-PW** or  
RS232C/RS485 Interface  
**MTR-480-PW**



Panasonic Healthcare Co., Ltd., Gunma Factory is certified for:  
**Quality management system: ISO9001**  
**Medical devices quality management system: ISO13485**



Panasonic Healthcare Co., Ltd., Gunma Factory is certified for:  
**Environmental management system: ISO14001**

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