

Preservation
sub-zero



MDF-U700VX

Dual Cooling System

-86°C
728 liters/25.7cu.ft.

Intelligent
ECO mode operation

Safe and Secure Extra-Large Capacity Ultra-Low Freezer with Dual Cooling System

- Newly developed Dual Cooling System for ultimate sample protection
- Intelligent ECO mode operation provides more energy savings
- Inner doors removable for cleaning and defrosting
- Enhanced security
- Improved accessibility with vacuum release port
- Quiet operation
- Can hold up to 528 boxes (2-inch) or 336 boxes (3-inch).
- User-friendly filterless design

VIP series
Vacuum Insulation Panel

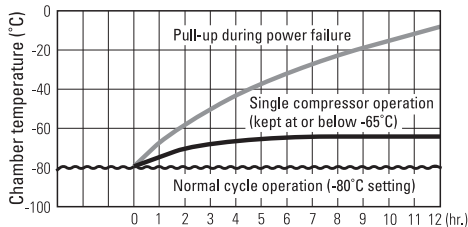


MDF-U700VX

Features

Secure storage with New Dual Cooling System

The Dual Cooling System is newly designed to securely store valuable biological samples. It consists of two individual compressors to provide a reliable -86°C ultra-low temperature environment. Should unexpected failure occur in one cooling circuit, the other will maintain at least -65°C.



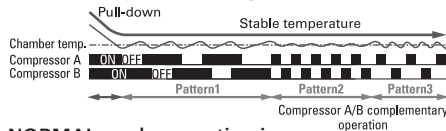
High efficiency insulation using V.I.P. technology

The MDF-U700VX uses patented V.I.P. vacuum insulation that reduces the cabinet wall thickness by approximately half and achieves up to 30% more storage capacity than conventionally insulated freezers, all without increasing its footprint.

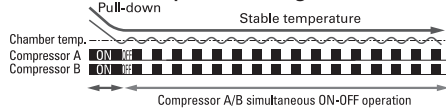
Intelligent ECO mode operation

“ECO mode” is an industry first feature. The two compressors, A and B, are independently controlled to optimise operation efficiently to minimise energy consumption by monitoring freezer load status.

ECO mode operation image



NORMAL mode operation image



Graphic Control Panel

Central LCD display control panel enhances operability and visibility. Data log function retains operation data for a preset period and the data can be directly transmitted to a PC via MTR-480-PW interface.

The MDF-U700VX is certified as a Class IIa Medical Device (93/42/EEC and 2007/47/EC) for medical purposes of storing cells, DNA and/or frozen plasma. (For EU countries only)



Panasonic Healthcare Co., Ltd., Biomedical Business Unit is certified for:
Quality management system: ISO9001
Medical devices quality management system: ISO13485



Panasonic Healthcare Co., Ltd., Biomedical Business Unit is certified for:
Environmental management system: ISO14001

User-friendly design

- Various alarms including high/low temperatures, door ajar, power failure alarm and part replacement notification help to keep samples safe even in an emergency.
- A vacuum release port allows smooth door opening even when the door seal is tightened by negative pressure generated by the temperature difference between chamber and ambient environment.

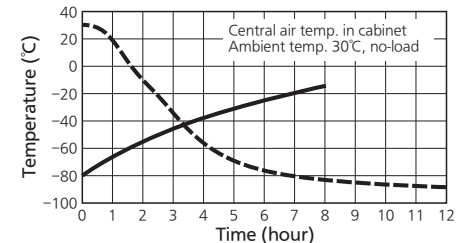
- Filterless construction eliminates bothersome filter cleaning.
- Rugged, one-handed outer door latch allows a padlock to be attached.



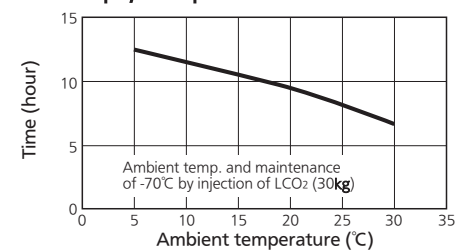
Door latch

Performance Data

- Pull-up characteristics during power failure
- - - Pull-down characteristics

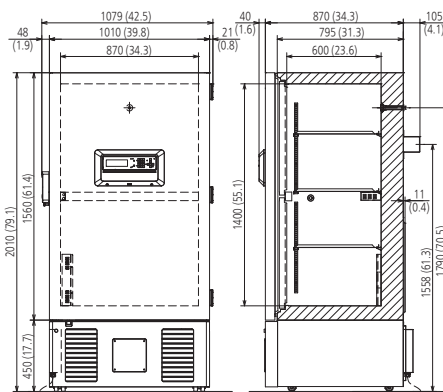


CO₂ backup system operation characteristics



Dimensions

Unit : mm (inch)



Specifications

	Model No.
220V, 50Hz	MDF-U700VX-PB
220V, 60Hz	MDF-U700VX-PK
230V/240V, 50Hz (CE)	MDF-U700VX-PE
Temperature range	-50°C to -86°C
Maximum cooling performance	-86°C (Ambient temp. 30°C)
External dimensions (W x D x H)*1	1010 x 870 x 2010 (mm) / 39.8 x 34.3 x 79.1 (inch)
Internal dimensions (W x D x H)	870 x 600 x 1400 (mm) / 34.3 x 23.6 x 55.1 (inch)
Net weight	Approx. 375 kg (827 lbs.)
Effective capacity	728 liters (25.7 cu.ft.)
Shelves	3 pcs, stainless steel tray
Access port	17mm diameter, 3 locations (back, bottom left/right corner)
Compressor	2 compressors, hermetic 1100 W
Refrigerant	HFC
Alarms and safety	High/low temperature, Door ajar, Power failure, Remote alarm contact, Part replacement notification, Fan lock alarm, Refrigeration circuit abnormal alarm
Remote alarm contact	Allowable contact capacity: DC 30V, 2A
Accessories	1 scraper, Vacuum release port cleaning gear, 1 set of keys

*Cooling performance is indicated by the temperature reached at the center of the freezer (at ambient temperature of 30°C with no load). In order to use the freezer at a stable temperature for a long time, it is recommended that the temperature be set to at least 5°C higher than the indicated lowest temperature.

In addition, depending on the usage conditions, it may not be possible to reach the indicated lowest temperature.

Caution: Panasonic guarantees the product under certain warranty conditions. Panasonic in no way shall be responsible for any loss of content or damage to content.

• Appearance and specifications are subject to change without notice.

*1 External dimensions of main cabinet only - see dimension drawings showing handles and other external projections.

Options

Inventory rack: **IR-220U-PW/IR-224U-PW**, Circular recorder: **MTR-G85C-PE**, Small inner doors: **MDF-7ID-PW**, Strip chart recorder: **MTR-85H-PW**, Recorder mounting bracket: **MDF-S3085-PW** (for MTR-85H-PW), LCO₂ backup system: **CVK-UB2-PW/UB21-PW**, Data acquisition system: **MTR-5000-PW**, Interface board: **MTR-L03-PW** (Except for EU countries), **MTR-480-PW**

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