

Panasonic

VIP Dual Cool Series

-86°C Ultra-Low Freezers

MDF-U700VX-PE

VIP dual cool



Secure storage with Dual Cooling refrigeration

- Dual Cooling System for ultimate sample protection
- Intelligent ECO mode operation provides more energy savings
- Improved accessibility with vacuum release port
- Quiet operation
- User-friendly filterless design
- Certified as a Class IIa Medical Device

Discovery powered by
precision

-86°C Ultra-Low Freezers MDF-U700VX-PE

VIP **dual cool**

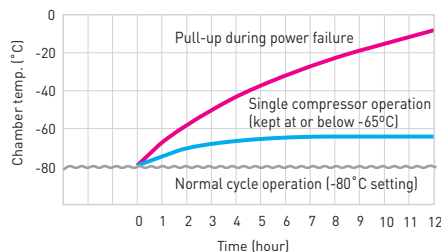
The Dual Cooling system is newly designed to provide the highest level of security for valuable biological samples.

Secure storage with new Dual Cooling system

The Dual Cooling System is newly designed to securely store valuable biological samples. Two independent refrigeration systems provide a reliable -86°C ultra-low temperature environment. Should unexpected failure occur in one cooling circuit, the other will maintain the freezer in the -70°C range.

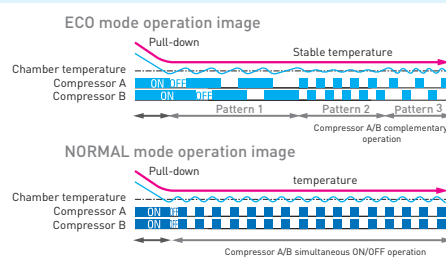
High efficiency insulation using V.I.P. technology

Panasonic's patented V.I.P. technology has resulted in a revolutionary vacuum insulation cabinet construction that reduces wall thickness by approximately one half and achieves up to 30% more storage capacity than conventionally insulated freezers, without increasing its footprint.



Intelligent ECO mode operation

"ECO mode," an industry first operation, achieves approx. 15% energy savings than conventional models. The two compressors, A and B, are independently controlled to optimise operation efficiently to minimise energy consumption by monitoring load status on the freezer.



Graphic control panel


A central LCD display panel allows for ultimate operability. Temperature performance graphs can be visualized on screen and a data log function allows information to be transmitted to a PC via the interface module.

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.



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)

| VIP Dual Cool Series | | |
|--|---|------------------------------------|
| Characteristics |  | |
| PUF = Rigid polyurethane foamed insulation | | |
| V = Visual alarm | | |
| B = Buzzer alarm | | |
| R = Remote alarm | | |
| MODEL | MDF-U700VX-PE | |
| Dimensions | | |
| External dimensions (W x D x H) | mm | 1010 x 870 x 2010 |
| Internal dimensions (W x D x H) | mm | 870 x 600 x 1400 |
| Effective capacity | litres | 728 |
| Net weight (approx) | kg | 383 |
| Performance | | |
| Cooling performance ¹⁾ | °C | -86 |
| Temperature setting range | °C | -50 ~ -90 |
| Temperature control range ¹⁾ | °C | -50 ~ -86 |
| Control | | |
| Controller | | Microprocessor Non-volatile memory |
| Vacuum release port | | Yes |
| Display | | LCD |
| Temperature sensor | | Pt-1000 |
| Refrigeration | | |
| Refrigeration system | | Independent Dual-Cooling |
| Low-stage compressor | W | 2 x 1100 |
| Low-stage refrigerant | | HFC Mixed |
| Insulation material | | PUF / VIP Plus |
| Insulation thickness | mm | 70 |
| Alarms | | |
| Power failure | | V-B-R |
| High temperature | | V-B-R |
| Low temperature | | V-B-R |
| Filter | | Filterless design |
| Door open | | V-B |
| Construction | | |
| Exterior material | | Painted steel |
| Interior material | | Painted steel |
| Inner door | qty | 2 (Insulated) |
| Outer door lock | | Y |
| Shelves (adjustable) | qty | 3 |
| Max. load - per shelf | kg | 50 |
| Max. load - total | kg | 150 |
| Access port | qty | 3 |
| - position | | Back/Bottom x 2 |
| - diameter | Ø mm | 17 |
| Casters | qty | 4 (2 leveling feet) |
| Electrical and Noise Level | | |
| Power supply | | 230V 50Hz Single phase |
| Noise level ²⁾ | dB | 53 |
| Options | | |
| Liquid CO ₂ Back-up | | CVK-UB2-PW |
| Liquid N ₂ Back-up | | CVK-UBN2-PW |
| Temperature recorders | | |
| - Circular type (-100°C to +40°C) | | MTR-G85C-PE |
| - Chart paper | | RP-G85-PW |
| - Ink pen | | PG-R-PW |
| - Continuous strip type (-100°C to +50°C) | | MTR-85H-PW |
| - Chart paper | | RP-85-PW |
| - Ink pen | | DF-38FP-PW |
| - Recorder housing | | MDF-S3085-PW |
| RS485 interface module | | MTR-480-PW |
| Drawers | qty | - |
| Small inner door kit | set of 2 | MDF-71D-PW (Max 2) |

notes: ¹⁾ Air temperature measured at freezer centre, ambient temperature +30°C, no load
²⁾ Nominal Value

Appearance and specification are subject to change without notice.

Panasonic

for more information:

www.biomedical.panasonic.eu