

VIP Dual Cool Series

-86°C Ultra-Low Freezers

MDF-U700VX-PE

VIP dual cool



Secure storage with Dual Cooling refrigeration

- Newly developed 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

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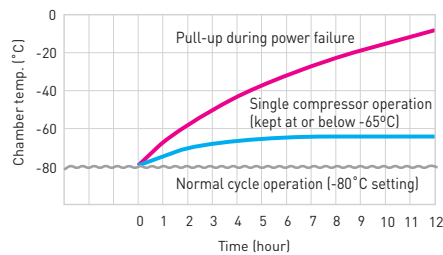
The Dual Cooling system is newly designed to provide the highest level of security for valuable biological samples.

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.

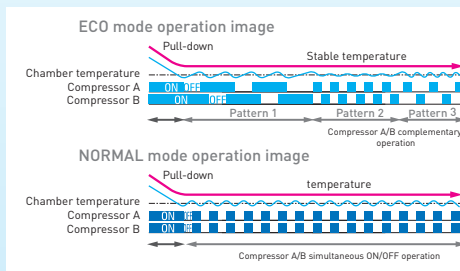
High efficiency insulation using V.I.P. technology

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)

Panasonic

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-51D-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.

for more information:

www.biomedical.panasonic.eu