Ultra-Low Temperature Freezer





Dual Cooling System

-86°C 728 liters/25,7 cu.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

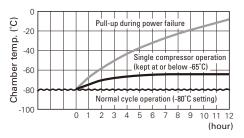




Features

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

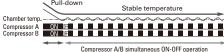
The MDF-U700VX uses patented V.I.P. vacuum insulation that reduces the cabinet wall thickness by approximately half and achieves up to 30% more storage capacity than conventionally insulated freezers, all without increasing its footprint.

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 Pull-down





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)

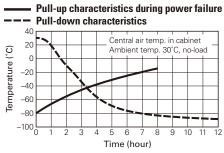
User-friendly design

- 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.

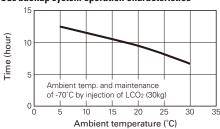


Door latch

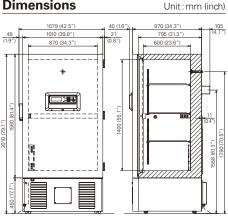
Performance Data



CO₂ backup system operation characteristics



Dimensions



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 interface.



Specifications

Model	MDF-U700VX
Temperature range	−50°C to −86°C
Maximum cooling performance	−86°C (Ambient temp. 30°C)
Exterior dimensions (W x D x H)	1010 x 870 x 2010mm (39.8" x 34.3" x 79.1")
Interior dimensions (W x D x H)	870 x 600 x 1400mm (34.3" x 23.6" x 55.1")
Net weight	Approx. 375kg (827 lbs.)
Effective capacity	728 l (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 mixed refrigerant
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: SANYO guarantees the product under certain warranty conditions. SANYO in no way shall be responsible for any loss of content or damage to content.

Appearance and specifications are subject to change without notice.

Options





Inventory rack IR-220U IR-224U

Small inner MDF-7ID



Strip chart recorder MTR-85H

(for MTR-85H)





CVK-UB2/UB2(I)

SANYO DAQ (data acquisition) System MTR-5000 Ethernet (LAN) Interface MTR-L03 (Except for EU countries) RS232C/RS485 Interface MTR-480



SANYO Electric Co., Ltd., Biomedical Division, Gunma Factory is certified for:

Medical devices quality management system: ISO13485

SANYO Electric Co., Ltd., Biomedical Division, Gunma Factory is certified for:

Environmental management system: ISO14001 (JACO)



