

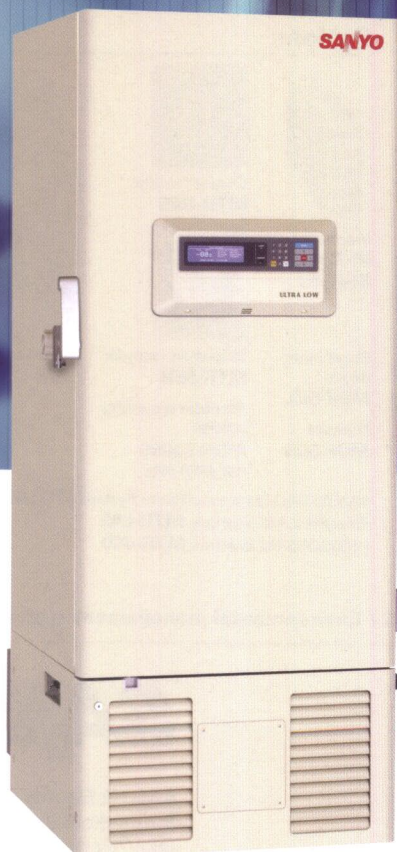
Think GAIA
For Life and the Earth

SANYO

Ultra-Low Temperature
Freezer

MDF-U500VX

Preservation
sub-zero



MDF-U500VX

Dual Cooling System

-86°C
519 liters/18.3 cu.ft.

**Intelligent
ECO mode operation**

**Safe and secure large capacity
Ultra-Low Freezer with new 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 by vacuum release port
- Quiet operation
- Can hold up to 352 pcs of 2-inch boxes or 224 pcs of 3-inch boxes
- User-friendly filterless design

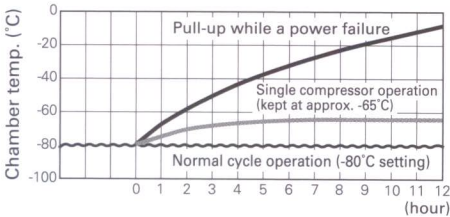
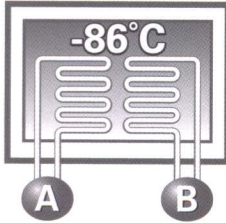
VIP
series
Vacuum Insulation Panel

MDF-U500VX

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 -65°C range.



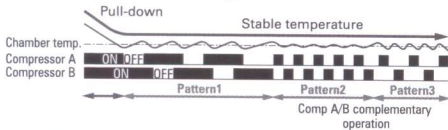
High efficiency insulation using V.I.P. technology

SANYO'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.

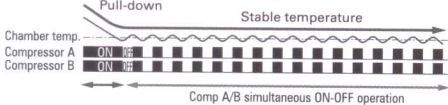
Intelligent ECO mode operation

"ECO mode," an industry first operation, achieves approx. 15% (230V/50Hz) 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.

ECO mode operation image

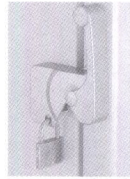


NORMAL mode operation image



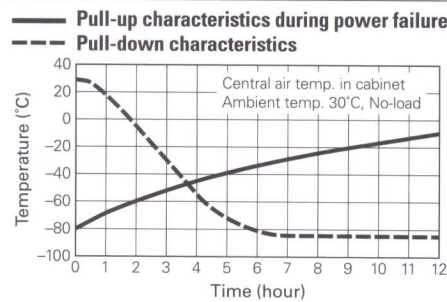
User-Friendly Design

- Various alarms including high/low temperatures, door ajar, power failure alarm and part replacement notification keep samples safe even in an emergency.
- A vacuum release port allows smooth door opening when the door is tightened by negative pressure generated from temperature difference between chamber and ambient environment.
- Filterless construction eliminates bothersome filter cleaning.
- New rugged, one-handed outer door latch allows a padlock to be attached.

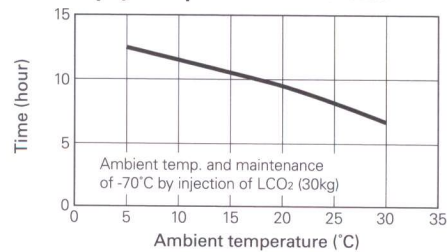


Door latch

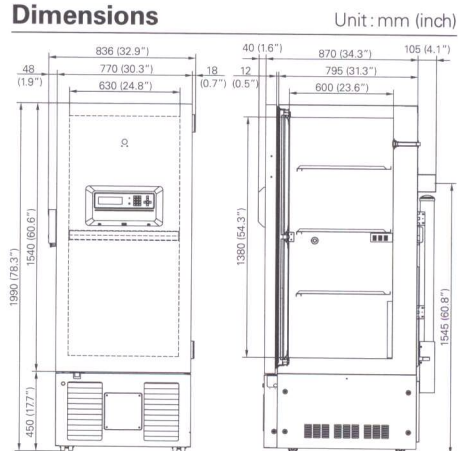
Performance Data



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 data can directly be transmitted to a PC via MTR-480.



Specifications

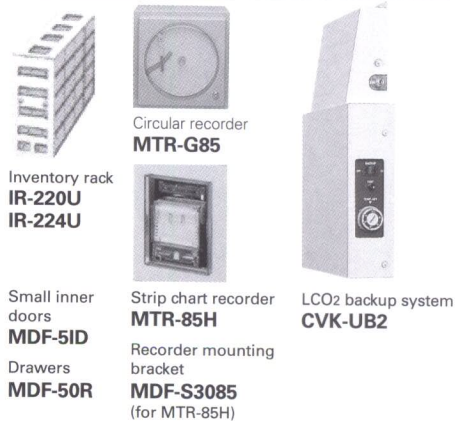
Model	MDF-U500VX
Temperature range	-50°C to -86°C
Maximum cooling performance	-86°C (Ambient temp. 30°C)
Exterior dimensions (W x D x H)	770 x 870 x 1990mm (30.3" x 34.3" x 78.3")
Interior dimensions (W x D x H)	630 x 600 x 1380mm (24.8" x 23.6" x 54.3")
Net weight	Approx. 320kg (705 lbs.)
Effective capacity	519 L (18.3 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



SANYO DAQ (data acquisition) System **MTR-5000**
 Ethernet (LAN) Interface **MTR-L03**
 RS232C/RS485 Interface **MTR-480**

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

Quality management system: ISO9001 / Medical devices quality management system: ISO13485 / Environmental management system: ISO14001

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