

Ultra-Low Temperature V.I.P.™ Freezer

SANYO

MDF-U54V



MDF-U54V

Energy Saving

-86°C
519 liters/18.3 cu.ft.

Patented V.I.P.™
(Vacuum Insulation Panel)

Large capacity, space saving Ultra-Low Freezer with Improved energy consumption

- V.I.P.™ technology maximises storage capacity
- New refrigeration system enables more energy efficient operation
- Safe operation with Status Alert continuous condition monitoring
- The inner doors removable for cleaning and defrosting
- Enhanced security with new rugged outer door latch
- Improved accessibility
- Quiet operation
- Improved energy consumption
- Can hold up to 352 pcs of 2-inch boxes or 224 pcs of 3-inch boxes

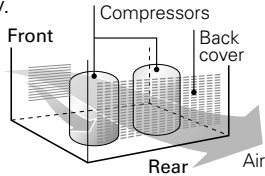
VIP
series
Vacuum Insulation Panel

MDF-U54V

Features

EVOLUTIONARY DESIGN

- SANYO V.I.P.™ Evolution Series -86°C ultra-low temperature freezers use patented revolutionary vacuum insulation cabinet construction that reduces the wall thickness from 14cm to 7cm (5.5" to 2.7") and achieves up to 30% more storage capacity than conventionally insulated freezers, without increasing its footprint.
- The newly developed refrigerating circuit regulates high stage compressor ON-OFF cycles, resulting in improved energy efficiency by approx. 10%* more than previous models, for quieter environment.
- *Based on data measured using the JIS-determined method.
- The ventilating back cover combines with the aerodynamically designed and positioned components in the refrigeration compartment to provide superior air flow, drastically reducing the load on the freezer and contributing to improved durability.



- Two independent and insulated inner doors with gaskets prevent cold air leakage.

RELIABILITY

- Status Alert (Condition monitor) Monitors ambient and system conditions continuously and notifies of any abnormalities before a problem happens.

ACCESSIBILITY

- A beak style inner door latch tightly closes the inner door against the freezer frame. It also helps make opening and closing the door smoother.
- The condenser filter is situated at the bottom right side of the front panel to make filter removal and cleaning easier.



SAFETY

- Alarm lamp and buzzer offer secure warning of power failure or abnormal temperature increase.
- High and low temperature warning provides an audible and visual alarm when the temperature deviates more than $\pm 5^{\circ}\text{C}$ to $\pm 20^{\circ}\text{C}$ (adjustable) from the set point.
- Alarm ring-back function ensures that buzzer will resume operation, should alarm conditions continue after it is silenced.
- Microprocessor-controlled filter-clog check function protects the refrigeration circuit.
- The new rugged, one-handed outer door latch allows a padlock to be used to securely protect valuable samples.



- Control panel with digital display for easy operation.



Specifications

Model	MDF-U54V
Temperature range	-50°C to -86°C (1°C increments)
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. 296kg (653 lbs.)
Effective capacity	519 L (18.3 cu.ft.)
Shelves	Stainless steel, 3 shelves
Access port	17mm diameter, 3 locations (back, bottom left/right corner)
Compressor	Hermetic type, Output: 1100 W (high stage side), 1100 W (low stage side)
Refrigerant	HFC
Alarm	High/low temperature, Power failure, Filter check, Self diagnostics, Door check, Part replacement notification
Remote alarm contact	Allowable contact capacity: DC 30V, 2A
Accessories	1 set of keys, 1 scraper

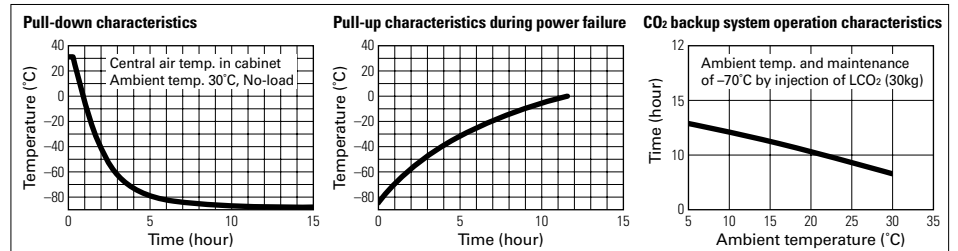
*Cooling performance is indicated by the temperature reached at the center of the freezer (at ambient temperature of 30°C with no load). In order to use the freezer at a stable temperature for a long time, it is recommended that the temperature be set to at least 5°C higher than the indicated lowest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

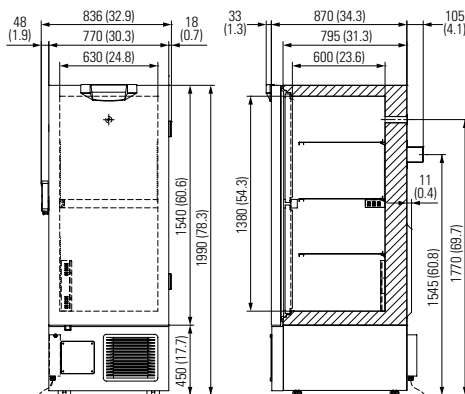
• Appearance and specifications are subject to change without notice.

Performance Data



Dimensions

[Unit: mm (inch)]



Options

Inventory rack IR-220U IR-224U	3 drawers (for lower chamber) MDF-50R	Circular recorder MTR-G85	LCO ₂ backup system CVK-UB2 LN ₂ backup system CVK-UBN2
Strip chart recorder MTR-85H	Recorder mounting bracket MDF-S3085 (for MTR-85H)		
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

RoHS (European Restriction of Hazardous Substances directives) compliant

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