

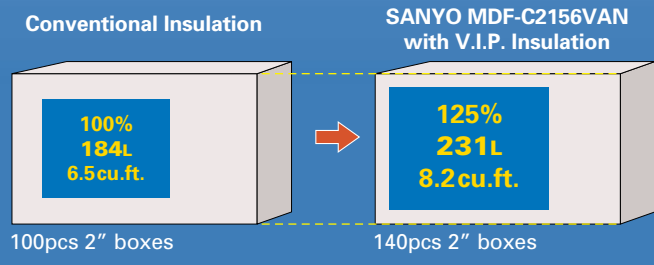
-150°C Ultra-Low Temperature V.I.P.™ Freezer

MDF-C2156VAN

- New V.I.P. PLUS™ technology maximises storage capacity.
- Comfortable operation via LCD control panel
 1. Chamber temperature recorded for up to 1 month
 2. Warning messages displayed in LCD panel
 3. Records history of door opening/closing (more than 2 minutes)
- Can hold up to 14,000 tubes (2ml)
- Product conforms to RoHS (European Restriction of Hazardous Substances directives)



231L (8.2 cu.ft.)
140 2" inventory boxes
98 3" inventory boxes



V.I.P. PLUS Evolution series -150°C



MDF-C2156VAN

Features

Evolutionary Design

- SANYO V.I.P. PLUS™ Evolution Series -150°C ultra-low temperature freezers use patented revolutionary vacuum insulation cabinet construction that reduces the wall thickness from 175mm to 135mm (6.9" to 5.3") and achieves up to 25% more storage capacity than a conventionally insulated freezer without increasing the footprint.
- The newly developed refrigeration system and the freezer structure offer a quiet experimental environment.
- Achieves 50% higher energy conservation than previous model. (For model rated 220V, 50Hz)

Reliability

- Status Alert monitors ambient and system conditions continuously and notifies of any abnormalities before a problem happens.
- Equipped with LN₂ backup system as standard to prepare for any contingency.

Ideal replacement for LN₂ storage

Compared to liquid nitrogen systems, SANYO MDF-C2156VAN offers the following advantages:

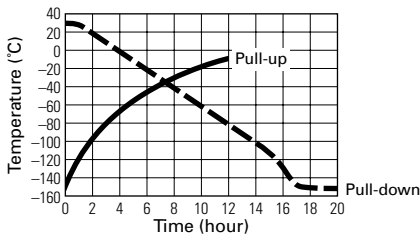
- Lower running cost
- Easy maintenance
- No occurrence of contamination

Performance Data

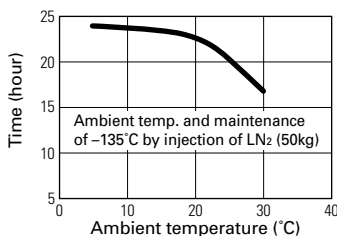
Pull-down characteristics

Pull-up characteristics during power failure

Central air temp.in cabinet Ambient temp. 30°C, No-load

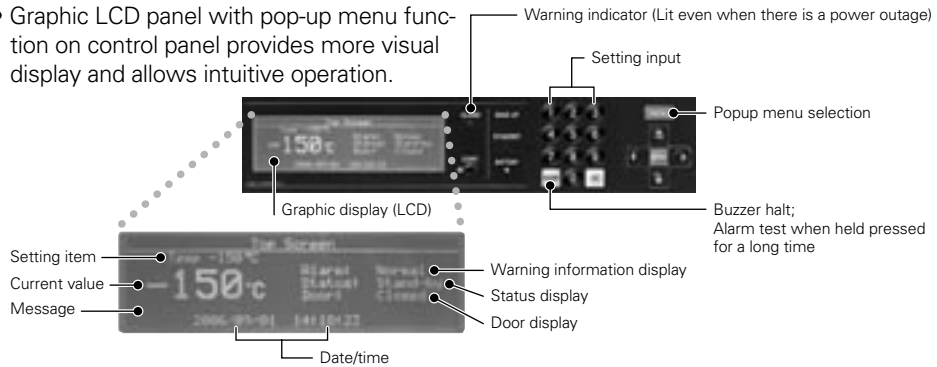


LN₂ back up system operation characteristics

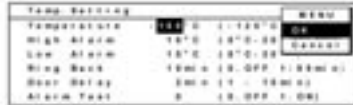


Innovative Control Panel

- Graphic LCD panel with pop-up menu function on control panel provides more visual display and allows intuitive operation.



Setting display

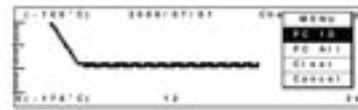


Access control

To prevent unauthorized access to freezer settings, the key lock can only be cancelled by inputting the password.

Data logging function

Recording of internal temperature for 1 month or 1 week period
Recording of history of door opening/closing (more than 2 minutes)



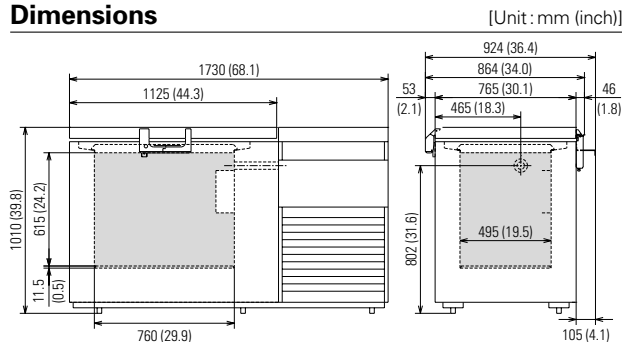
Specifications

Model	MDF-C2156VAN
Temperature range	-125°C to -150°C (1°C increments)
Maximum cooling performance	-150°C (Ambient Temp. 30°C)
Exterior dimensions (W x D x H)	1730 x 765 x 1010 mm (68.1" x 30.1" x 39.8")
Interior dimensions (W x D x H)	760 x 495 x 615 mm (29.9" x 19.5" x 24.2")
Net weight	Approx. 319 kg
Effective capacity	231L (8.2 cu.ft.)
Access port	40 mm diameter, 1 location
Compressor	Hermetic type, Output: 1100W (high stage side), 1100W (low stage side)
Refrigerant	HFC
Alarm	High/Low temperature, Power failure, Filter check, Self diagnosis, Door check, Part replacement notification
Remote alarm contact	Allowable contact capacity, DC 30V, 2A
Accessories	1 set of keys, 1 scraper, Connecting tube for LN ₂ backup system

*Appearance and specifications are subject to change without notice.

*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.

Dimensions



Options



Inventory rack
IR-210C
Max capacity: 14pcs

Chart paper
RP-155

Ink pen
DF-38FP

Strip chart recorder
MTR-155H

SANYO DAQ
(Data Acquisition)
system

Recorder mounting
bracket (for MTR-155H)
MDF-S30150

**MTR-480/
MTR-2000**

Further details regarding this product can be accessed at <http://www.sanyo.co.jp/cm/g/biomedical>

We design and manufacture products in accordance with ISO9001 & 14001 requirements.
RoHS (European Restriction of Hazardous Substances directives) compliant

Distributed by:

SANYO

SANYO Electric Co., Ltd.
Biomedical Division

©2007 SANYO Printed in Japan 2007.7 MA
SHR111