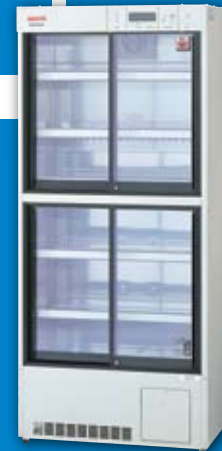


# Pharmaceutical Refrigerator

MPR-311D(H)



SANYO's pharmaceutical refrigerators are compact but have a large capacity for reliable storage of pharmaceutical and medical supplies.

SANYO has developed the Medi-Cool lineup of medical refrigerators that are equipped with advanced cooling and electronic technology to provide precise temperature for the ideal preservation of medical supplies.

## Remarkable Cooling Efficiency

A highly efficient hermetic compressor, specially designed and developed by SANYO, is utilized to provide powerful and rapid cooling to maintain proper temperature levels.

## Uniform Storage Unaffected by Ambient Temperature

SANYO's Medi-Cool MPR series offers a complete solution to meet strict and exact temperature requirements for pharmaceutical, medicine and temperature sensitive biological storage. An electronic sensor accurately monitors chamber temperature for precise control. Fans ensure gentle air circulation to provide top to bottom temperature control after frequent door openings.

## Effective Temperature Control

**Electronic Temperature Control System:** A thermistor sensor monitors temperature inside the chamber, and microprocessor and electronic temperature controls ensure that the set temperature is maintained. Even with frequent door openings, the circulation fan provides rapid temperature adjustment for a highly reliable, stable preservation environment unaffected by ambient temperature.

**Cycle Defrost System:** Defrosting is performed automatically during compressor 'off' cycles and by sensing frost levels. This method of defrosting is performed only when required, further protecting the contents against unnecessary temperature rise.

## Equipped with Digital Temperature Display

Easy to read digital display. Temperature readings are displayed in gradients of 1°C for settable temperatures ranging from 2° to 14°C.

## Cabinet Construction

Space Saving Design - less installation space is required with the use of two easy to open, double paned sliding glass doors preventing ultraviolet and heat rays from affecting contents or temperature in the chamber.

- Rigid polyurethane foam insulation construction acts to keep cold air inside the unit and effectively protects against the intrusion of warm air.
- Chemical resistant stainless steel interior surfaces of the cabinet ensures long lasting service for many years of use.

## Door Open Alarm

When the door opens the 'Door Open' lamp lights automatically. After 30 seconds, a buzzer alarm will sound if the door has not been closed. If door openings longer than 30 seconds are desired, the alarm can be deactivated.

## Abnormal Temperature Alarm and Safety Devices

If the inside temperature of the MPR-311D(H) descends below 0°C or rises above 15°C the buzzer alarm will sound and the digital temperature display will flash. If the internal temperature reaches below -2°C or above 20°C, the low and high temperature safety devices prevent the contents of the refrigerator from freezing or the temperature from rising abnormally while the visible and audible alarms are activated.

**Preservation**  
My life. My work. My choice.

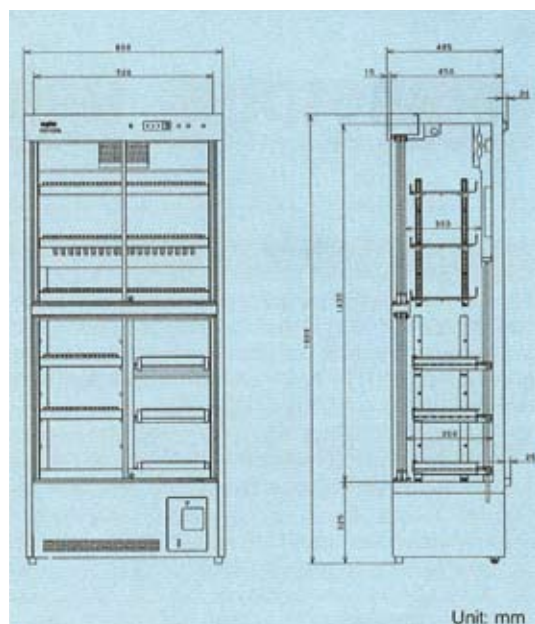
## Specifications

Model No.	MPR-311D(H)
External dimensions	31.4"(W) x 70.8"(H) x 17.7"(D) (800 x 1,800 x 450mm)
Internal dimensions	23.3"(W) x 56.4" (H) x 13.7"(D) (720 x 1,435 x 350mm)
Effective capacity	12.01 cu.ft. (340L)
Cabinet	Painted steel
Interior	Stainless steel
Insulation	Polyurethane foam
Doors	Sliding glass doors, double-paned glass with heat-reflective film
Shelves	Rigid wire with zinc-plated finish
Access Port	30mm on back wall
Lighting/Casters	20W fluorescent lamp (1)/ 2 casters
Temperature recorder	MTR-C954
Voltage	115V, 60Hz, 1 Phase
Amps/Breaker	2.5 / 15 A Breaker
Compressor	Hermetic type, 160W
Refrigerant	HFC
Evaporator	Fin & tube, forced air circulation
Condenser	Wire & tube
Defrosting	Cyclical defrosting & evaporator temp.detection system
Defrosting heaters	114W
Temp. control	Electronic temp. control [range: 2°-14°C (35.6-57.2°F)]
Temp. display	Digital [display range: 0°-15°C (32-59°F)]
High temp. alarm system	Flashing digital indicator [above 15°C (59°F)], Buzzer [above 15°C (59°F)] High-temp. indicator lamp [above approx. 20°C (68°F)]
Low temp. alarm system	Flashing digital indicator [below 0°C], Buzzer [below 0°C] Defrost indicator lamp [below approx. -2°C (28°F)]
Door ajar alarm	Buzzer/door ajar lamp
Weight	198lbs (90kg)

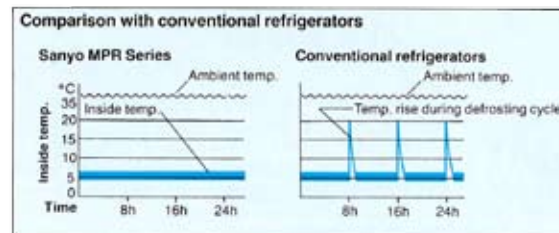
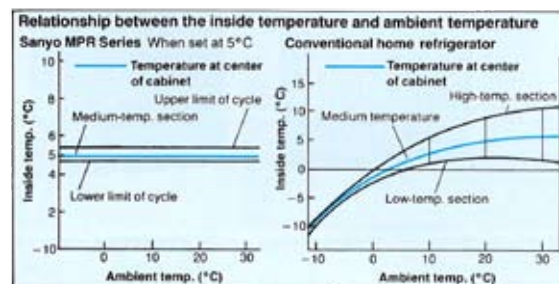
## Accessories:

- Independent Remote Alarm Module Model #T140100HRB
- Circular Chart Recorder MTR-C954

## Dimensions



## Temperature Comparison Charts



SANYO Electric Co.,Ltd., Biomedical Division, Gumma is certified for Quality management system:ISO9001/  
Medical devices Quality management system:ISO13485/Environmental management system:ISO14001



SANYO is committed to developing green technologies that provide energy efficiency resulting in lower operational costs with less impact on the environment.

**SANYO**

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