

Pharmaceutical Refrigerators



MPR-514
MPR-514R
MPR-1013
MPR-1014R

MPR-1014R



MPR-514

PHARMACEUTICAL REFRIGERATORS

The Ideal +4° Pharmaceutical Refrigeration in Capacities from 17.2 to 36.5 cu. ft.

SANYO's MPR Series Pharmaceutical Refrigerators offer a complete and integrated solution for the growing requirements for strict and exact storage temperatures for pharmaceuticals, medicines, and temperature sensitive biologicals. The slim design and optional sliding shelves allows for an ergonomic easy-reach retrieval of your product.

- Superior cooling performance
- Microprocessor temperature control
- Cycle defrost function
- Fan-forced air circulation
- Energy efficient
- Alarm and safety devices

innovation
performance
reliability
support

p r e s e r v a t i o n

STORAGE

Uniform storage is unaffected by ambient temperature.

An electronic sensor accurately monitors chamber temperature and feeds the information to the microprocessor for precise control at preset temperature. Fans ensure gentle air circulation to provide uniform top to bottom temperature control after frequent door openings. SANYO's easily calibrated, reliable and stable controls make validation easier.

COMPRESSOR

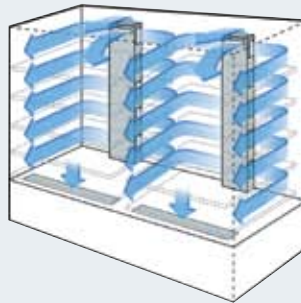
Remarkable cooling efficiency.

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

UNIFORMITY

Plenums Direct Airflow

SANYO's plenum design features uniform cold air flow distribution throughout the chamber to ensure temperature uniformity—essential for validated storage requirements.



DEFROST SYSTEM

SANYO's Cyle Defrost System

Defrosting is performed automatically during compressor "off" cycles, and by sensing frost levels. This way defrosting is performed only when required, further protecting the contents against unnecessary temperature rise. The defrosting heater also acts as an emergency heat source to prevent samples from freezing in extremely low ambient temperature conditions.

MPR-514

Effective capacity: 17.2 cu. ft.



Cooling Performance: **2°C to 14°C**
(Ambient temp. -5°C to 35°C)

MPR-1014R

Equipped with sliding shelves (right side)
Effective capacity: 36.5 cu. ft. (1,034 liters)



Cooling Performance: **2°C to 14°C**
(Ambient temp. -5°C to 35°C)



p r e s e r v a t i o n

DESIGN

Ergonomic Design

The ergonomic design of the MPR series refrigerators provides a clear view of stored items through the large framed windows. The slim profile allows for easy reach retrieval of your products. Users can choose from two types to suit their needs.

SAFETY

• Cabinet Construction

View window design with protective film to prevent shattered glass from scattering on to the floor. Key locked doors.

• Control safety devices

Audible and flashing LED visual alarms alert you to the unlikely event of either a high or low temperature condition. An over-shooting prevention circuit automatically switches off the fan motor or heater, if the inside temperature rises abnormally.

• Remote alarm contacts

Low/high temperature audible and visual alarms and remote alarm contacts.



ENVIRONMENTAL FRIENDLY

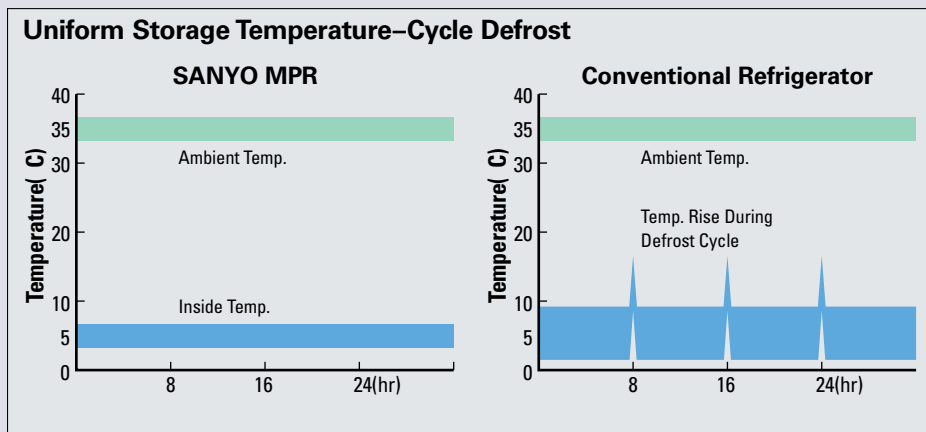
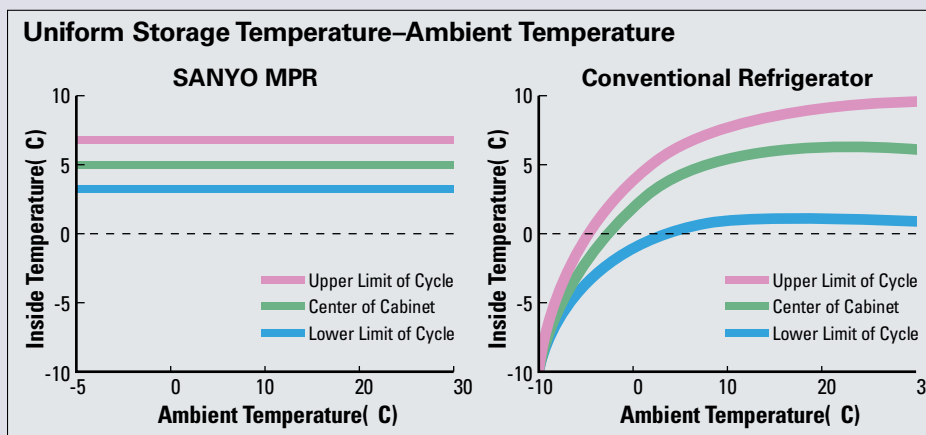
SANYO is CFC-Free

SANYO refrigerators feature commercially available CFC-free, HFC refrigerants and CFC-free insulation.



SANYO is RoHS Compliant

On July 1, 2006, the RoHS legislation (EU Directive 2002/95/EU) came into effect. RoHS is the restriction of hazardous substances to reduce the amount of pollution in the environment. Toxic substances in electrical equipment such as Lead, Cadmium, Mercury, Chromium 6+, PBB & PBDE, which can do serious harm to the environment, have been banned. The SANYO MPR series refrigerators are compliant with these regulations.



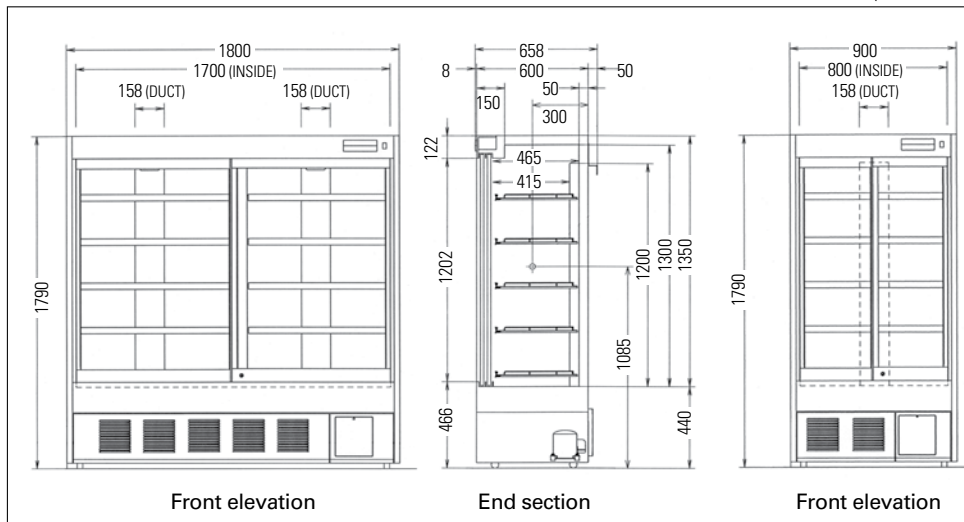
Specifications

Model No.	MPR-514, MPR-514R	MPR-1013, MPR-1014R
External dimensions (mm) W x D x H (inch)	900 x 600 x 1790 35.4 x 23.6 x 70.5	1800 x 600 x 1790 70.9 x 23.6 x 70.5
Interior dimensions (mm) W x D x H (inch)	800 x 465 x 1300 31.5 x 18.3 x 51.2	1700 x 465 x 1300 66.9 x 18.3 x 51.2
Effective capacity	489 liters (17.2 cu.ft.) MPR-513 486 liters (17.2 cu.ft.) MPR-513R	1037 liters (36.6 cu.ft.) MPR-1013 1034 liters (36.5 cu.ft.) MPR-1013R
Exterior cabinet	Baked-on acrylic finish galvanized steel	
Interior cabinet	Stainless steel	
Outer door	2 sliding doors Double layer glass window	
Cabinet insulation	CFC-free Rigid polyurethane foamed-in-place	
Outer door lock	1	
Shelves & Sliding racks	5 polyester coated wire shelves Load: 50kg per shelf (MPR-513)	10 polyester coated wire shelves Load: 50kg per shelf (MPR-1013)
	5 polyester coated wire shelves Load: 20kg per shelf 5 polyester coated sliding racks Load: 20kg per rack (MPR-513R)	5 polyester coated wire shelves Load: 50kg per shelf 10 polyester coated sliding racks Load: 20kg per rack (MPR-1013R)
Cooling method	Forced cool air circulation	
Evaporator	Fin and tube	
Condenser	Wire tube, Tube on sheet	Fin and tube
Compressor	225W Hermetically sealed	300W Hermetically sealed
Refrigerant	R-134a	
Fan motor	for cooling	For cooling: output 3W
	for condensing	—
Defrosting	Forced type, fully automatic	
Power Requirements	115V/60 Hz/1 phase	NEMA 5-15P Plug
Net weight	136kg (299lbs) MPR-513 142kg (312lbs) MPR-513R	240kg (528lbs) MPR-1013 252kg (554lbs) MPR-1013R

*Appearance and specifications are subject to change without notice.

DIMENSIONAL DIAGRAMS

(Unit : mm)



OPTION

**Temperature Recorder
MTR-C954 (Circular Type)**



SANYO Commercial Solutions
A Division of SANYO North America