

## Pharmaceutical Refrigerators

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



SANYO's +4°C MPR Series offers a complete and integrated solution for the increased requirements of strict and exact storage temperatures for pharmaceuticals, medicines, vaccines and other temperature sensitive biologicals. The slim front-to-back design and optional sliding shelves allows for an ergonomic easy-reach retrieval of your product.



Model: MPR-514 and MPR-1014R

# Pharmaceutical Refrigerators

## Storage

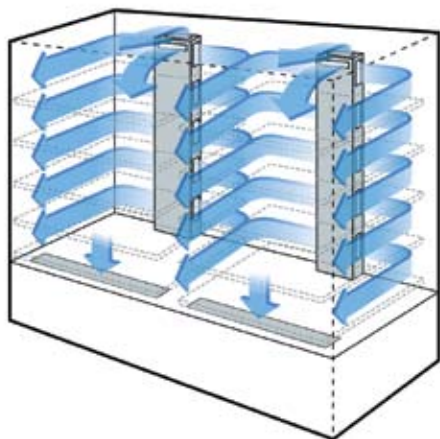
### Uniform storage is unaffected by ambient temperature

An electronic sensor accurately monitors chamber temperature and feeds the information to the microprocessor for precise control at the 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.

## Superior 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.



## 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 and superior uniformity.

## Defrost System

### SANYO's Cycle Defrost System

Defrosting is performed automatically during compressor "off" cycles 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 (below 0°C).

## 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 of interior shelving to suit their needs.

## Safety

### • Cabinet Construction

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



### MPR-514R

Effective capacity: 17.2 cu.ft. (486 liters)  
Equipped with sliding shelves (right side)

Adjustable Range: **2°C to 14°C**  
(Ambient temp. -5°C to 35°C)

### MPR-514

Effective capacity: 17.3 cu.ft. (489 liters)

Adjustable Range: **2°C to 14°C**  
(Ambient temp. -5°C to 35°C)



**• Control safety devices**

Audible and flashing LED visual alarms alert you to the unlikely event of either a high or low temperature condition. An overshooting 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.



**Environmentally Friendly**

**SANYO is CFC-Free**

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

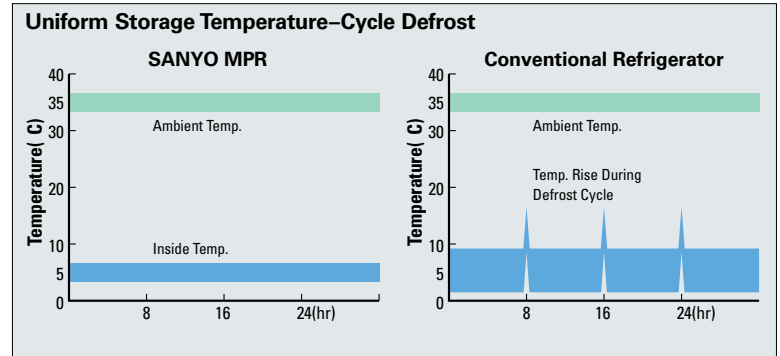
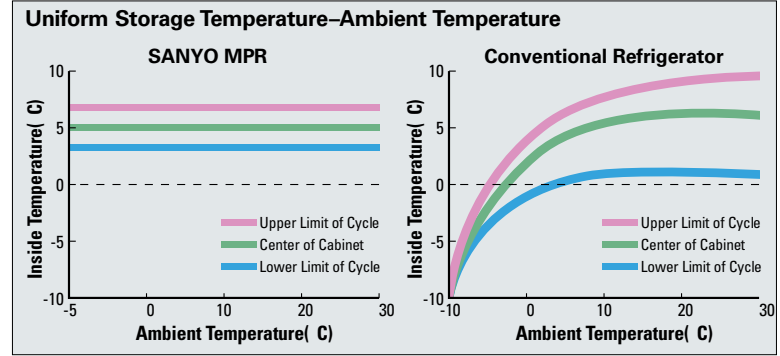


**SANYO is RoHS Compliant**

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.



**Temperature Performance Chart**



**Superior Cooling Performance,  
Ideal +4°C Environment**



**MPR-1014R**  
Equipped with sliding shelves (right side)  
Effective capacity: 36.5 cu.ft. (1,034 liters)  
Adjustable Range: **2°C to 14°C**  
(Ambient temp. -5°C to 35°C)

**MPR-1014**  
Effective capacity: 36.6 cu.ft. (1,037 liters)  
Adjustable Range: **2°C to 14°C**  
(Ambient temp. -5°C to 35°C)



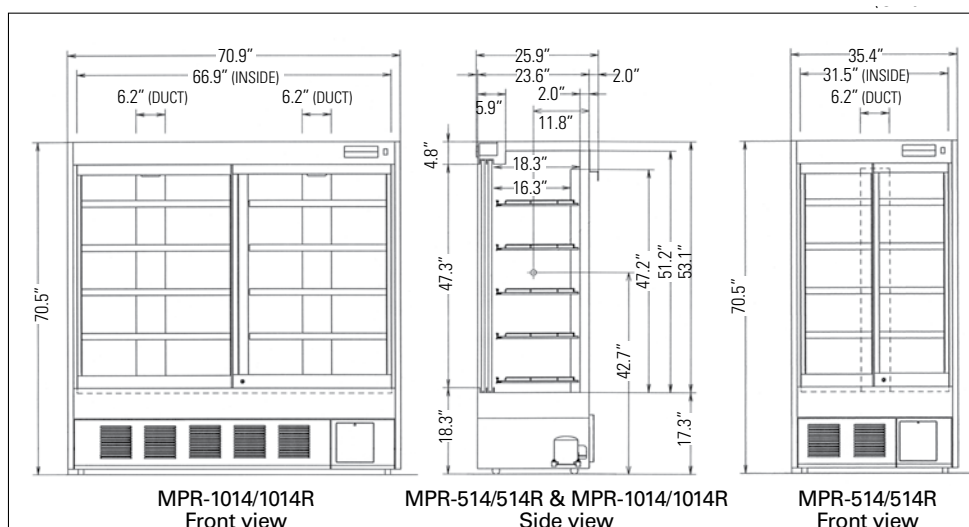
# Specifications



| Model No.   | MPR-514, MPR-514R   | MPR-1014, MPR-1014R  |
|---|---|--|
| <b>External dimensions (mm)</b><br>W x D x H (inch) | 35.4 x 23.6 x 70.5<br>900 x 600 x 1790  | 70.9 x 23.6 x 70.5<br>900 x 600 x 1790   |
| <b>Interior dimensions (mm)</b><br>W x D x H (inch) | 31.5 x 18.3 x 51.2<br>800 x 465 x 1300  | 66.9 x 18.3 x 51.2<br>1700 x 465 x 1300  |
| <b>Effective capacity</b>                           | 489 liters (17.3 cu.ft.) MPR-514<br>486 liters (17.2 cu.ft.) MPR-514R   | 1037 liters (36.6 cu.ft.) MPR-1014<br>1034 liters (36.5 cu.ft.) MPR-1014R  |
| <b>Exterior cabinet</b>                             | Baked-on acrylic finish galvanized steel  |  |
| <b>Interior cabinet</b>                             | Stainless steel   |  |
| <b>Outer door</b>                                   | 2 sliding doors<br>Double paned glass window  |  |
| <b>Cabinet insulation</b>                           | CFC-free, Rigid polyurethane, foamed-in-place   |  |
| <b>Outer door lock</b>                              | 1   |  |
| <b>Shelves &amp; Sliding racks</b>                  | MPR-514: 5 polyester coated wire shelves<br>Load: 110kg per shelf   | MPR-1014: 10 polyester coated wire shelves<br>Load: 110kg per shelf  |
|   | MPR-514: 5 polyester coated wire shelves<br>Load: 110lbs per shelf<br>MPR-514R: 5 polyester coated sliding shelves<br>Load: 10lbs per shelf | MPR-1014: 5 polyester coated wire shelves<br>Load: 110lbs per shelf<br>MPR-1014R: 10 polyester coated sliding shelves<br>Load: 10lbs per shelf |
| <b>Cooling method</b>                               | Forced cool air circulation   |  |
| <b>Evaporator</b>                                   | Fin and tube  |  |
| <b>Condenser</b>                                    | Wire tube, Tube on sheet  | Fin and tube   |
| <b>Compressor</b>                                   | 225W Hermetically sealed  | 300W Hermetically sealed   |
| <b>Refrigerant</b>                                  | R-134a  |  |
| <b>Fan motor</b>                                    | <b>for cooling</b>  | For cooling: output 3W   |
|   | <b>for condensing</b>   | —  |
|   |   | For cooling: output 3W x 2<br>For condenser: output 4W   |
| <b>Defrosting</b>                                   | Fully Automatic Cycle Defroster   |  |
| <b>Power Requirements</b>                           | 115V/60 Hz/1 phase, NEMA 5-15P Plug   |  |
| <b>Net weight</b>                                   | 299lbs (136kg) MPR-514<br>312lbs (142kg) MPR-514R   | 528lbs (240kg) MPR-1014<br>554lbs (252kg) MPR-1014R  |

\*Appearance and specifications are subject to change without notice.

## Dimensions (inch)



## Options



7 Day, 6 inch  
Circular Chart  
**Temperature Recorder**  
Model No. MTR-C954

**Alarm Battery Back-up**  
Model No. MPR-48B

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.

Product conforms to RoHS (Restriction of Hazardous Substance directives)

**SANYO**

SANYO North America Corporation  
Biomedical and Environmental Solutions Division  
1300 Michael Drive, Wood Dale, IL 60191 USA  
Toll Free USA 800-858-8442 • Fax 630-238-0074  
www.sanyobiomedical.com

SANYO Canada, Inc.  
201 Creditview Road, Woodbridge, Ontario L4L 9t1  
905-265-4100 • Fax 905-265-4101