

## Pharmaceutical Refrigerators



### Uniformity with Forced Air Circulation

Fans ensure gentle air circulation to provide uniform top to bottom temperature control after frequent door openings.

### Remarkable Cooling Efficiency

A highly efficient hermetic compressor is utilized to provide efficient cooling and maintain a set temperature level.

### Ergonomic Design

The ergonomic design provides a clear view of stored items through the large framed windows. The slim profile allows for easy reach retrieval of your products.

High Performance



Uniformity



Optimum Footprint



12.0 cu.ft. (340 L)

### Operating Range

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



### Microprocessor Controls

Comprehensive **setpoint and alarm, monitoring** with **diagnostic functions** are based on Panasonic-built microprocessor controller with digital display of all input/output functions, adjustable temperature range 2°C to 14°C.



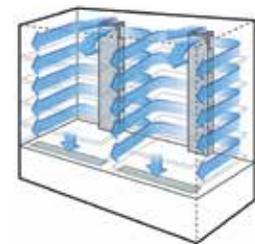
Door alarm lamp

Digital Temperature Indicator



### Validated Storage

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





# Pharmaceutical Refrigerators

Panasonic offers an integrated solution for strict and exact storage temperatures for necessary pharmaceuticals, medicines, vaccines, and other temperature-sensitive biologicals.

## 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 the products.

## Safety

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

## Effective Temperature Control

A thermistor sensor monitors temperature inside the chamber. The microprocessor and the 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.

## Cabinet Construction

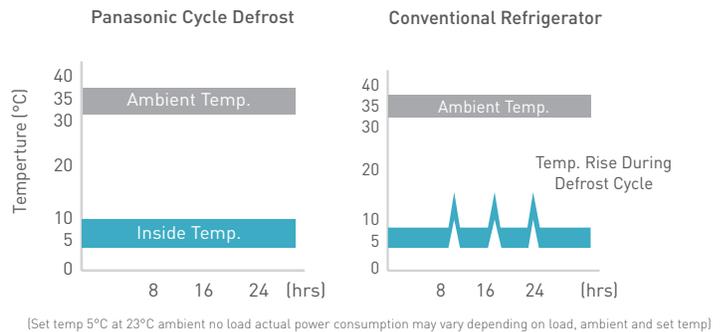
Due to the space saving design, less installation space is required. The use of two easy-to-open, double-paned sliding glass doors tightly seal to maintain uniformity.

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 ensure long lasting service for many years of use.

## 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).



MODEL	MPR-S313-PA
TEMPERATURE RANGE	2°C to 14°C
INTERIOR DIMENSIONS (W X D X H)	28.3" x 13.8" x 56.5" (720 x 350 x 1435 mm)
EXTERIOR DIMENSIONS (W X D X H)	31.5" x 18.3 x 70.9" (800 x 465 x 1800 mm)
VOLUME	12.0 cu.ft. (340 liters)
WIRE SHELVES	Adjustable
OUTER DOORS	Sliding glass doors. Double-paned glass with heat-reflective film.
OUTER DOOR LOCK	2 Lock, 2 Keys
SHELVES & SLIDING RACKS	Rigid wire with zinc-plated finish
COMPRESSOR	Hermetic type, 160W
TEMPERATURE DISPLAY	Digital (display 0°C to 15°C)
DEFROSTING	Fully Automatic Cycle Defrost and Evaporator Temperature Detection System
POWER REQUIREMENTS	115V / 60 Hz / 3.8 kWh / Day NEMA 5-15P Plug,
NET WEIGHT	220 lbs. (100 kg)
ACCESS PORT	30 mm on back wall