

## Pharmaceutical Refrigerators

### Uniformity with Forced Air Circulation

Fan-forced air circulation allows for precise temperature uniformity, even after frequent door openings. Ideal for highly regulated storage of pharmaceuticals, medicines, vaccines, and other temperature-sensitive materials.

### Remarkable Cooling Efficiency

A highly efficient hermetic compressor provides efficient cooling and maintains 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 all products.



High Performance



Uniformity



Optimum Footprint



17.3 cu.ft.

### Operating Range

The digital display communicates the temperature readings in the gradients of 1°C. The settable temperature for pharmaceutical refrigerators ranges from 2° to 14°C.

### Stable Temperature



### Microprocessor Controls

Comprehensive **setpoint, alarm, monitoring,** and **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.

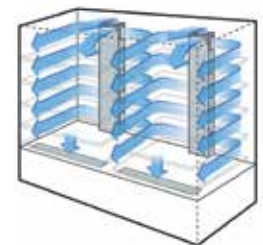


Door alarm lamp

Digital Temperature Indicator

### Validated Storage

Panasonic's plenum design allows for uniform cold air flow distribution throughout the chamber to ensure temperature uniformity. This is essential for validated storage requirements.





# Pharmaceutical Refrigerators

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

## 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 overshooting 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

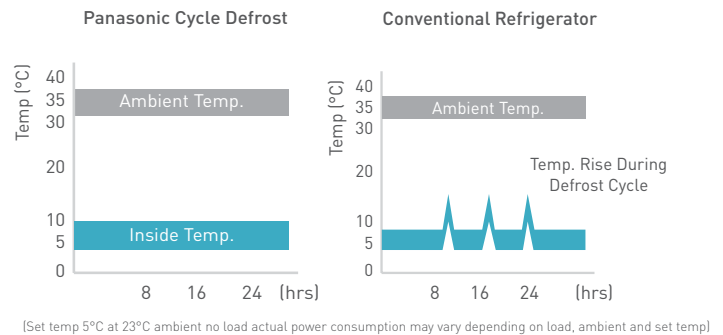
Due to the space saving design, less installation space is required. The use of two easy-to-open, double-paned sliding glass doors tightly seal to maintain uniformity.

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-514-PA
TEMPERATURE RANGE	2°C to 14°C
EXTERIOR DIMENSIONS (W X F-B X H)	35.4" x 23.6" x 70.5" 900 x 600 x 1790 mm
INTERIOR DIMENSIONS (W X F-B X H)	31.5" x 18.3" x 51.2" 800 x 465 x 1300 mm
VOLUME	17.3 cu.ft. (489 liters)
WIRE SHELVES	Adjustable
OUTER DOORS	2 Sliding doors. Double paned glass window.
SHELVES & SLIDING RACKS	5 Polyester coated wire shelves. (Load: 110lbs. per shelf)
COOLING METHOD	Forced cool air circulation
COMPRESSOR	Hermetic type, output: 200W
DEFROSTING	Fully Automatic Cycle Defrost
POWER REQUIREMENTS	115V/60 Hz/6.43 kWh/day, NEMA 5-15P Plug
NET WEIGHT	311 lbs. (141 kg.)

MODEL	MPR-514R-PA
TEMPERATURE RANGE	2°C to 14°C
EXTERIOR DIMENSIONS (W X F-B X H)	35.4" x 23.6" x 70.5" 900 x 600 x 1790 mm
INTERIOR DIMENSIONS (W X F-B X H)	31.5" x 18.3" x 51.2" 800 x 465 x 1300 mm
VOLUME	17.2 cu.ft. (486 liters)
WIRE SHELVES	½ Adjustable, ½ Roll-out
OUTER DOORS	2 Sliding doors. Double paned glass window.
SHELVES & SLIDING RACKS	5 Polyester-coated wire shelves and sliding racks. (Load: 44 lbs. per shelf or rack)
COOLING METHOD	Forced cool air circulation
COMPRESSOR	Hermetic type, output: 200W
DEFROSTING	Fully Automatic Cycle Defrost
POWER REQUIREMENTS	115V/60 Hz/6.43 kWh/day, NEMA 5-15P Plug
NET WEIGHT	324 lbs. (147 kg.)