

## Pharmaceutical Refrigerators



### Uniformity with Forced Air Circulation

Forced air circulation allows for precise temperature uniformity, even after frequent door openings.

### Remarkable Cooling Efficiency

A highly efficient hermetic compressor provides efficient cooling and maintains temperature level.

### Ergonomic Design

Large glass panels allow for an easy viewing of stored items. The slim profile also allows for quick retrieval of all products.

High Performance



Uniformity



Optimum Footprint



36.4 cu.ft. | 36.3 cu.ft.

### Operating Range

The digital display shows temperature readings in the gradients of 1°C. The configurable 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.



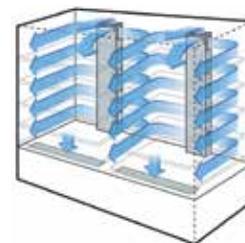
Door alarm lamp

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 samples.

## 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 retrieval of all 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

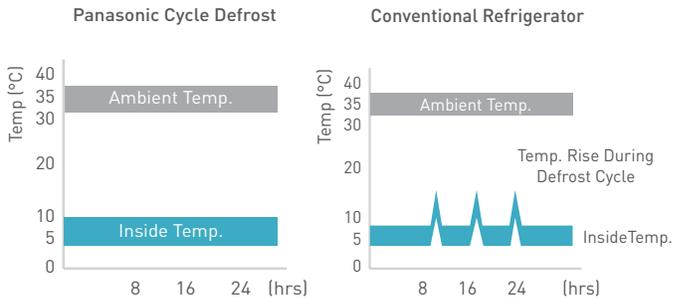
Due to the space saving design, less installation space is required. Two double-paned sliding glass doors seal tightly to maintain uniformity.

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-1014-PA
TEMPERATURE RANGE	2°C to 14°C
EXTERIOR DIMENSIONS (W X F-B X H)	70.9" x 23.6" x 70.5" 1800 x 600 x 1790 mm
INTERIOR DIMENSIONS (W X F-B X H)	66.9" x 18.3" x 51.2" 1700 x 465 x 1300 mm
EFFECTIVE CAPACITY	36.5 cu.ft. (1033 liters)
WIRE SHELVES	Adjustable
OUTER DOORS	2 Sliding doors. Double paned glass window with heat reflection film.
SHELVES & SLIDING RACKS	10 Polyester-coated wire shelves (Load: 110 lbs. per shelf)
COOLING METHOD	Forced cool air circulation
INTERNAL LIGHTING	Fluorescent
DEFROSTING	Fully Automatic Cycle Defrost
POWER REQUIREMENTS	115V/60 Hz/6.43 kWh/day, NEMA 5-15P Plug
NET WEIGHT	542 lbs. (246 kg.)

MODEL	MPR-1014R-PA
TEMPERATURE RANGE	2°C to 14°C
EXTERIOR DIMENSIONS (W X F-B X H)	70.9" x 23.6" x 70.5" 1800 x 600 x 1790 mm
INTERIOR DIMENSIONS (W X F-B X H)	66.9" x 18.3" x 51.2" 1700 x 465 x 1300 mm
EFFECTIVE CAPACITY	36.3 cu.ft. (1029 liters)
WIRE SHELVES	½ Adjustable, ½ Roll-out
OUTER DOORS	2 Sliding doors. Double paned glass window with heat reflection film.
SHELVES & SLIDING RACKS	5 Polyester-coated shelves and 10 polyester-coated sliding racks (Load: 110 lbs. per shelf and 44 lbs. per rack)
COOLING METHOD	Forced cool air circulation
INTERNAL LIGHTING	Fluorescent
DEFROSTING	Fully Automatic Cycle Defrost
POWER REQUIREMENTS	115V/60 Hz/6.43 kWh/day, NEMA 5-15P Plug
NET WEIGHT	569 lbs. (258 kg.)