

# Refrigerator Series

## Pharmaceutical Refrigerators

MPR-S163-PE / MPR-S313-PE



### Forced air circulation

- Precise temperature control
- Superior cooling performance
- Reliable storage of pharmaceutical and medical supplies
- Double-glazing glass door
- Slim, and space saving design
- Useful alarm functions

# Pharmaceutical Refrigerators MPR-S163-PE / MPR-S313-PE

Panasonic's new cycle defrosting system achieves up to 15%\* energy savings compared to previous Panasonic models. The intelligent cyclical defrost system switches on during each compressor-off cycle for just as long as necessary to defrost the evaporator, therefore saving energy and also preventing any affect on the refrigerator temperature unlike the defrost cycles used in many domestic type models.

## User friendly design

### New control panel

- Newly designed for improved operability, visibility, and calibration
- Digital setup for easy and secure operation
- Temperature alarm parameters adjusted using the control panel

### LED interior light

The LED interior light automatically turns on/off in conjunction with the door opening/ closing. It can also be controlled from the control panel.

### Double-paned glass with heat-reflective film

The refrigerator doors constructed of double-paned glass with heat-reflective film, allow easy loading and unloading of medical supplies preventing ultraviolet rays damaging the stored items. Panasonic's unique heat-reflective film blocks the passage of radiant heat rays through the glass panels and keeps the inside temperature from being adversely affected by excessive amounts of heat.

## Effective temperature control

### Microprocessor temperature control

A thermistor sensor monitors temperature inside the chamber, and microprocessor temperature control ensures that the set temperature is maintained. Even if the door is opened and closed frequently, the circulation fan ensures rapid temperature adjustment to provide a highly reliable, stable preservation environment that is not affected by ambient temperature.

### Fan-forced air circulation

Uniform temperatures throughout the refrigerator are achieved by the fan-forced air circulation system. No matter how the load is distributed, every corner of the unit is immediately cooled with no noticeable variation in temperature apparent inside the cabinet.

## Enhanced alarm and safety functions

### Door open alarm

Upon every door opening, an indicator lamp will light up. If the door remains open for over a set length of time (adjustable between 0 to 15 minutes) a buzzer will sound to alert the user. A ring back function on the alarm will function if the buzzer is silenced but the door remains open (adjustable between 0 to 60 minutes).

### Abnormal temperature alarm

If the inside temperature changes  $\pm 2^{\circ}\text{C}$  to  $\pm 14^{\circ}\text{C}$  from the set temperature, the digital temperature display flashes, and a buzzer sounds an alarm after 15 minutes (adjustable from 0 to 15 minutes).

Refrigerator Series			
<b>Characteristics</b>			
PUF = Rigid polyurethane foamed insulation			
V = Visual alarm			
B = Buzzer alarm			
R = Remote alarm			
MODEL		MPR-S163-PE	MPR-S313-PE
<b>Dimensions</b>			
Exterior (W x D x H)	mm	800 x 465 x 1090	800 x 465 x 1800
Interior (W x D x H)	mm	720 x 300 x 725	720 x 350 x 1435
Effective capacity	litres	158	340
Weight	kg	71	100
<b>Construction</b>			
Exterior finish		Polyester resin finished bakes on zinc galvanised steel	
Interior finish		Stainless steel	
Outer doors	qty	2 sliding doors, double layer glass window with heat reflecting film	4 sliding doors, double layer glass window with heat reflecting film
Drawers	qty	2 wire shelves, clear coated	5 wire shelves, clear coated
- max. load/shelf or drawer	kg	20	
Castors	qty	2	
Access port	qty	1	
- position		back side	
- diameter	Ø mm	30	
Interior light		LED	
<b>Refrigeration &amp; temperature</b>			
Insulation		Rigid polyurethane foam	
Cooling method		Forced air circulation	
Defrost method		NEW cyclical defrost (plus forced defrost)	
Refrigerant		HFC	
Temperature control range	°C	2 ~ 14	
Temperature sensor		Thermistor	
Temperature control		Microprocessor	
<b>Alarms</b>		High/Low temperature, door open, power failure (option) Remote alarm contact DC 30V, 2A	
<b>Temperature display</b>		Digital LED	
<b>Options</b>			
<b>Temperature recorders</b>			
- Temperature chart recorder (-6°C to +20°C)		MTR-0621LH-PE	
- Chart paper		RP-06-PW	
- Ink pen		MPR-S30	
- Circular temp. chart recorder (-10°C to +40°C)		MTR-G04C-PE	
- Chart paper		RP-G04-PW	
- Ink pen		PG-R-PW	
- Recorder housing		MPR-S7-PW	
External mounting power failure alarm		MPR-48B1-PE	
RS485 interface module		MTR-480-PW, MTR-L03-PW <sup>1)</sup>	

notes: <sup>1)</sup> Requires MPR-48B1-PE

\*The data is a measured example [set temp. 5°C, AT 23°C, 230V 50Hz, no load].  
Actual power consumption will vary depending on the set and ambient conditions, loading and local voltage.

Appearance and specification are subject to change without notice.

# Panasonic

for more online information:

[www.biomedical.panasonic.eu](http://www.biomedical.panasonic.eu)