

# Refrigerator Series

## Pharmaceutical Refrigerators

MPR-215F-PE / MPR-414F-PE



### Refrigerator with a built-in freezer

- One unit with dual temperature zone
- Superior cooling performance
- Quiet operation
- Various alarm and safety devices

# Pharmaceutical Refrigerators with built-in freezer

## MPR-215F-PE / MPR-414F-PE

With the growing emphasis on proper storage of laboratory refrigerated products the market requires state-of-the-art equipment to provide uncompromised parameter control and performance. Panasonic pharmaceutical refrigerators have been purpose designed to deliver outstanding stability and uniformity for temperature sensitive samples.

### User friendly design

#### Safe storage

- Microprocessor control system provides accurate temperature.
- Fan-forced air circulation system (refrigerator) offers fast recovery of temperature and better uniformity.
- Unique cycle defrost system prevents temperature rising by shorter defrost cycles which activate after each compressor cycle.
- Various safety systems such as high/low temperature audible and visual alarms, remote alarm, door ajar alarm and keyed door locks.

#### Usability

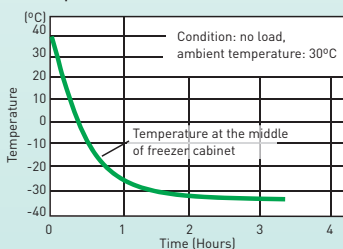
- One unit with dual temperature zone needs only minimal installation space.
- Four-door design reduces air loss during door opening and makes efficient use of space in front of unit. (MPR-414F-PE)
- Triple-pane (MPR-414F-PE) or double-pane (MPR-215F-PE) windows with heat reflection film reduce condensation.
- Zero adjustment through control panel and optional recorder provide easier validation service.



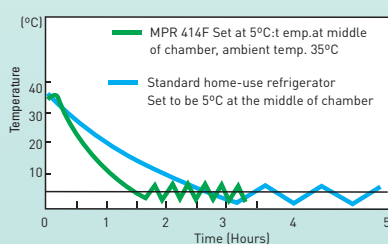
#### Quiet operation

- Two specially designed compressors offer quiet operation.

#### Freezer pull-down characteristics



#### Refrigerator pull-down data



### Refrigerator Series

#### Characteristics

PUF = Rigid polyurethane foamed insulation  
V = Visual alarm  
B = Buzzer alarm  
R = Remote alarm



MODEL	MPR-215F-PE	MPR-414F-PE
<b>Dimensions</b>		
Exterior (W x D x H)	mm 540 x 557 x 1794	800 x 465 x 1800
Interior (W x D x H)	mm 455 x 466 x 917 (Ref) 420 x 342 x 267 (Frz)	720 x 495 x 1425 (Ref) 317 x 440 x 576 (Frz)
Effective capacity	litres 176/39 (Ref/Frz)	340/82 (Ref/Frz)
Weight	kg 80	126
<b>Construction</b>		
Exterior finish	Polyester resin finish baked on zinc galvanized steel	
Interior finish	Styrol resin/Painted aluminium plate (Ref/Frz)	
Outer doors	qty 2	4
Shelves	qty 3/1 (Ref/Frz)	2 large & 3 small/1 (Ref/Frz)
- max. load/shelf	kg 20/10 kg (Ref/Frz)	25 & 15 kg/15 kg (Ref/Frz)
Castors	qty 4	
Access port	qty 2	
- position	1 left/1 left (Ref/Frz)	
- diameter	Ø mm 30	
<b>Refrigeration &amp; Temperature</b>		
Insulation	CFC-free rigid polyurethane foamed-in-place	
Cooling method	Fan forced air circulation (Ref) Direct cooling (Frz)	
Refrigerant	HFC	
Temperature control range	°C 2 ~ 14 (Ref) / -20 ~ -30 (Frz) [AT: +30°C no-load]	2 ~ 14 (Ref) / -20 ~ -30 (Frz) [AT: +35°C no-load]
Temperature sensor	Thermistor	
Temperature control	Microprocessor	
<b>Alarms</b>	High/Low temperature, power failure, door open 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	
- Recorder housing	MPR-S30-PW	
- Circular temp. chart recorder (-10°C to +40°C)	MTR-G3504C-PE	
- Chart paper	RP-G3504-PW	
- Ink pen	PG-RB-PW	
- Recorder housing	MPR-S7-PW	
- Continuous strip type (-40°C to +14°C)	MTR-4015LH-PE	
- Chart paper	RP-40-PW	
- Recorder housing	MPR-S30-PW	
RS485 interface module	MTR-480-PW	
Drawers for bottom left compartment		MPR-41R-PW

Appearance and specification are subject to change without notice.

# Panasonic

for more online information:

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