



## MPR Pharmaceutical Refrigerators with Natural Refrigerants

+2°C to +14°C



165 L / 345 L

### Uniform storage temperature for the most demanding applications

MPR Pharmaceutical Refrigerators offer a complete solution for the most demanding requirements for storage of pharmaceuticals, medicines, vaccines, and other temperature-sensitive applications.

### Natural Refrigerants and Inverter Technology

Hydrocarbon [HC] refrigerants have minimal effect on the environment and are compliant with environmental legislation for climate control. Combined with inverter technology, these refrigerants also provide more efficient cooling without compromising cooling performance, ambient tolerance and recovery time following door openings.

### OLED Control Panel

The microprocessor controller and OLED display have good visibility and intuitive operation. Control buttons allow convenient but secure user control. Refrigerator temperature can be displayed in 0.1°C increments. Minimum/maximum temperatures are automatically displayed every 12/24 hours. All alarm conditions are displayed and recorded.

### User-friendly Design

The ergonomic design of the MPR Pharmaceutical Refrigerators provides a clear view of stored items through the large glass door. The slim, hassle-free sliding glass door allows for easy retrieval of products, without the concern for swinging door clearance. Users can prevent unauthorized access by utilizing the keylock on the door.



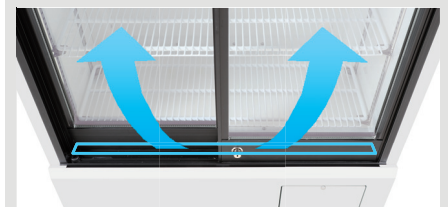
### Energy-efficient performance

Natural refrigerants, compressors and integrated electronics combine to achieve facility sustainability objectives by minimising any environmental impact without compromising cooling performance, ambient tolerance and recovery time following door openings.



### Safe & Secure storage

Adjustable audible and visual alarms are standard, along with integrated system diagnostics and predictive performance supervision. The password-protected control panel provides security and minimises risk of accidental changes. If desired, alarm and operating history can be uploaded through the USB port.



### Enhanced sliding glass door

The sliding glass door is meticulously designed to increase energy efficiency and safeguards stored items against heat transfer through the window. The thermal glass door is constructed from a double glass pane where argon gas is used to fill the 12 mm gap. Together with the air vents near the sliding glass door rail, it prevents the formation of moisture.

# Pharmaceutical Refrigerators with Natural Refrigerants

## Defrost Methods

Both models feature automatic defrost which activates electronically when needed. The refrigerator evaporator operates above freezing at all times. This prevents vaccines and lab supplies from freezing.

## 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.



## Available options



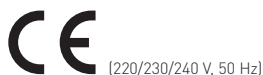
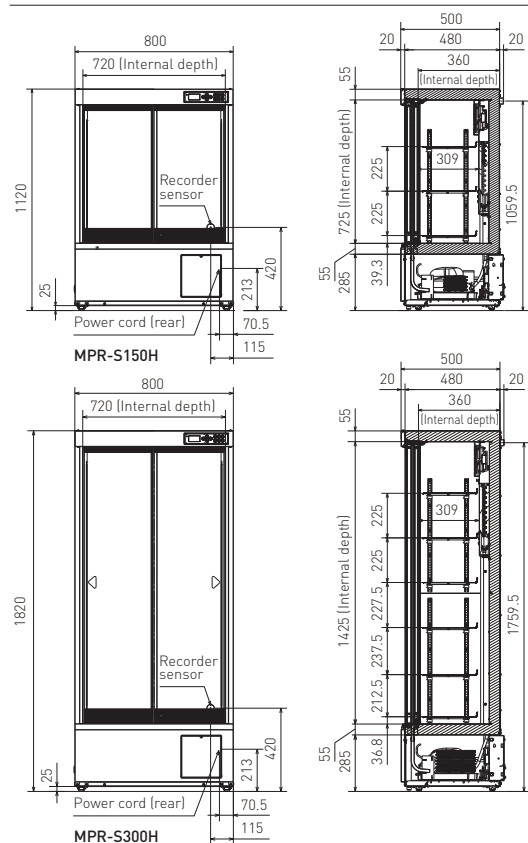
**MPR-31RR**  
Wire shelves (left), Sliding racks (right)



**MPR-150GH**  
Shading glass door

## Dimensions

Unit : mm



Model Number	MPR-S150H-PE MPR-S150H-PK	MPR-S300H-PE MPR-S300H-PK	MPR-S300H-PA	
External dimensions (W x D x H) <sup>1)</sup>	mm	800 x 500 x 1120	800 x 500 x 1820	
Internal dimensions (W x D x H)	mm	720 x 360 x 725	720 x 360 x 1425	
Volume	litres	165	345	
Net weight	kg	73	105	104
<b>Performance</b>				
Temperature control range <sup>2)</sup>	°C	2 to 14		
<b>Control</b>				
Controller	Microprocessor with non-volatile memory			
Display	Digital (White graphic OLED), 1°C (increment of 0.1)			
Temperature sensor	Thermistor			
<b>Refrigeration</b>				
Cooling method	Fan forced air circulation			
Defrost method	Cyclical defrost + forced defrost			
Refrigerant	HC refrigerant			
Insulation	PUF (Rigid polyurethane foamed insulation)			
<b>Construction</b>				
Exterior material	Painted Steel			
Interior material	Painted Steel			
Outer doors	qty	2 (Highly insulated double glass door with tempered glass)		
Outer door lock	Y			
Shelves	qty	3 coated steel wires	6 coated steel wires	
Dimensions	mm	W697 x D270		
Max. load - per shelf	kg	20		
Access port	qty	1		
Access port position	Back			
Access port diameter	∅ mm	30		
Casters	qty	4 [2 levelling feet]		
Interior light	LED			
<b>Accessories</b>				
Key	set	x 1		
<b>Alarms</b> (V = Visual Alarm, B = Buzzer Alarm, M = Message, R = Remote Alarm)				
Power failure <sup>3)</sup>	R <sup>3)</sup>			
High temperature	V-B-M-R			
Low temperature	V-B-M-R			
Door open	V-B-M			
<b>Electrical and Noise Level</b>				
Power supply	V / Hz	PE: 220, 230, 240/50 PK: 220/60	115/60	
Noise level <sup>4)</sup>	dB [A]	38		
<b>Options</b>				
Temperature chart recorders		MTR-0621LH-PE	MTR-0621LH-PA	
- Chart paper	RP-06-PW			
- Recorder housing	MPR-S30-PW			
Circular type chart recorders		MTR-G04C-PE	MTR-G04A-PA	
- Chart paper	RP-G04-PW			
- Ink pen	PG-R-PW			
- Recorder housing	MPR-S7-PW			
Battery kit for power failure alarm	MPR-48B2-PW			
Shading glass door	MPR-150GH for MPR-S150H, MPR-300GH for MPR-S300H			
Shelves & Sliding racks	-	MPR-31RR-PW (for lower right side) MPR-31LR-PW (for lower left side) <sup>5)</sup>		
<b>Optional Communication Systems</b>				
Digital interface (RS232C/RS485) <sup>6)</sup>	MTR-480-PW			
Ethernet interface (LAN) <sup>6)</sup>	MTR-L03-PW			
<b>Quality Management System</b>				
Certification	ISO9001			

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding external projections - See dimensions drawings on website for full details.  
<sup>2)</sup> Air temperature measured at refrigeration compartment centre and freezer compartment centre, ambient temperature +35°C, no load.  
<sup>3)</sup> Remote alarm includes optional power failure alarm MPR-48B2-PW (V-B-M-R alarm).  
<sup>4)</sup> Nominal value - Background noise 20dB [A]

<sup>5)</sup> Must be used in combination with MPR-31RR.  
<sup>6)</sup> Only for MTR-5000 (data acquisition system) users.  
 • Appearance and specifications are subject to change without notice.  
**Caution:** PHC Corporation guarantees this product under certain warranty conditions. However, please note that PHC Corporation shall not be responsible for any loss or damage to the contents stored in the product.

**TUV SUD** ISO 9001  
 Preservation Equipment, Experimental Environment Equipment, Dispensary Equipment, Culturing Equipment and Drying & Sterilising Equipment for General Laboratory use  
 The management of the design, development, production and servicing of the above.  
 PHC Corporation, Biomedical Division  
 1-1-1 Sakada, Oizumi-machi, Ora-gun, Gunma 370-0596, Japan

**MS JAB** CM021  
**ISO 14001** JACO  
**UKAS** MANAGEMENT SYSTEMS  
 EC97J1224 051

PHC Corporation Biomedical Division is certified for:  
**Environmental management system: ISO14001**

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