

### Life Science Innovator Since 1966

MPR-1412-PA MPR-1412R-PA

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MPR-1412-PA

# **Pharmaceutical Refrigerator**

Accurate Temperature Control with Fast Recovery to Setpoint

48.2 cu.ft. | 1364 L 48.0 cu.ft. | 1359 L

The MPR-1412-PA (shelves) and MPR-1412R-PA (drawers) large capacity pharmaceutical refrigerators deliver a stable, reliable temperature control for clinical, pharmaceutical, biomedical storage and processing. Fast recovery following door openings assures safe storage during frequent access and high ambient conditions.

### Positive Airflow Assures Interior Uniformity, Quick Recovery

Forced air circulation with multiple blowers assures temperature uniformity at all shelf or drawer levels. Internal shelf or drawer clearances permit the positive airflow to restore temperature to setpoint following door openings. This cooling power and airflow management compensates for heat generated by instrumentation if used inside the cabinet.

### Precision Temperature Control Protects Inventory

Many pharmaceuticals are degraded or destroyed if accidentally frozen. It is important that temperature be fixed at the desired setpoint in accordance with drug manufacturers' insert specifications. MPR Series pharmaceutical refrigerators operate over a temperature range of 2°C to 23°C, adjustable in 0.1°C increments. Actual interior air temperature is displayed to 0.1°C.

### Choose Your Inventory Management Preference

The MPR Series offers two choices in inventory control. The MPR-1412-PA includes 8 open-wire shelves strong enough to hold bulk loads. The MPR-1412R-PA is equipped with 8 heavyduty, fully-extendable painted steel pull-out drawers for more convenient access to stored product such as large bottles or reagent kits.



### Integrated Circulation Avoids Temperature Stratification

The top-mounted air circulation blower directs air down the back, side and front of the load in drawers or shelves. Regardless of location, all products are subjected to the same safe temperature to assure reproducibility and repeatability of stored product viability.



### Microprocessor Controls Simplify Operation

A microprocessor controller monitors all functions. Setpoint is factory set at 5°C. A soft key interface allows setpoint adjustment throughout the operating range. Audible and visual warnings indicate door ajar or temperature deviation from setpoint. The large easy-to-read LED display confirms actual temperature to 0.1°C resolution.



### Choose Your Inventory Management Preference

Open wire shelves (shown) are adjustable to allow for loads of varying heights such as bulk storage, or process equipment such as fraction collectors. The Model MPR-1412R-PA with pull-out drawers (not shown) offers a practical solution with additional ergonomic advantages for handling bulk items.



### **Upright Pharmaceutical Refrigerator**



### Ideal for Storage or Process Instrumentation

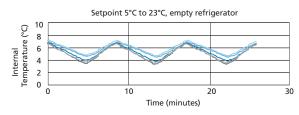
The MPR-1412R-PA pharmaceutical refrigerator is configured to provide close temperature control for both storage and process applications. A powerful refrigeration system delivers fast temperature pull-down, recovery and tolerance for high ambient temperatures. SNAP compliant refrigerants and energy efficiency helps improve LEED scores.

Model MPR-1412R-PA

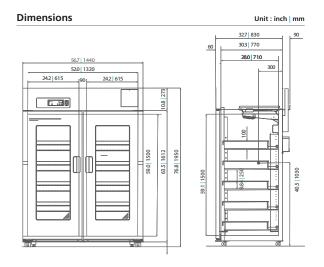
### **Cycle Defrost Function**

The cycle defrost and evaporator temperature sensor system ensures that defrost occurs only when necessary and automatically, so there is no need to turn off the power for defrosting.

### **Temperature Uniformity Data**



As interior air temperature stabilizes at the desired setpoint, large mass storage volume sustains tight temperature uniformity of the load inside the insulated cabinet.



## рнсы

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Net Weight	lbs kg	547 248	637   287	
Performance				
Temperature Control Range	°C	+2 to +23		
Warranty 2)		2 years parts and labor, 3 years compressor		
Vaccine Storage Operating Temperature	°C	+2 to +8		
Factory Pre-Set Temperature	°C	+5		
Highest Ambient Temperature and Maintains Cabinet Temperature	°C	+35		
Evaporator Prevents Critical Product from Freezing	°C	Standard feature		
Control				
Microprocessor Controller, Adjustable	°C	Increme	Increments of 0.1	
Digital Temperature Display		LED		
Controller Security		Lockable with key pad		
Electronics Diagnostics		Critical component failure warning		
Refrigeration				
Cooling Method Internal Airflow for Precise Temperature		Uniformity forced air		
Defrost Method Initiated Only as Needed		Electronically monitored evaporator		
Refrigeration System		Air cooled, CFC free		
Insulation		CFC/HFC free		
Construction				
Outer Door	qty	2- With du	al pane glass	
Interior		Zinc galvanized steel, Acrylic finish		
Exterior		Zinc galvanized steel, Acrylic finish		
Outer Door Lock		Key		
Interior Light		Yes - with control panel switch		
Shelves	qty	8 (adjustable, wire)	_	
Drawers	qty	—	10 (solid)	
Casters	qty	4 (2 swivel, 2 fixed)		
Adjustable Feet	qty	2 (front of base)		
Access Port	qty	2- Side; 1-Top		
Access Port Diameter	inches   mm	1.1   30		
Alarms		l Alarm, B = Buzzer Alarm, R = Re	emote Alarm)	
Power Failure		V-B-R		
Temperature (High and Low)		V-B-R		
Door Open		V-B		
Remote Alarm Contacts		Normally open, Normally closed, Common		
Remote Alarm Output		DC 24V 2A		
Electrical and Noise Level				
Power Supply		115V, 1Ø, 60Hz, NEMA 5-15P requires 5-15R receptacle		
Noise Level 3)	dB(A)	42		
Options				
Blackout Panels to Cover Glass	2	MPR72BP-PW		
Optional Communication System				
Wireless, Cloud-Based, Automatic Data Management		LabAlert® Monitoring System		

inches | mm

inches | mm

cu.ft. | liters

<sup>1)</sup> Exterior dimensions of main cabinet only, excluding handle and other external projections. Consult product sales rep for doorway entry instructions, less than 36.2".

<sup>2)</sup> Current warranty offered at time of printing and may be subject to change; US and Canada only

<sup>3)</sup> Actual value, background noise 20 dB(A)

External Dimensions (W  $\times$  D  $\times$  H)<sup>1</sup>

Internal Dimensions (W × D × H)

Volume

### Specifications are subject to change without notice.

For latest specification information contact PHC Corporation of North America at info@us.phchd.com. Performance data herein is based on independent testing at time of publication.

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### MPR-1412-PA | MPR-1412R-PA

56.7 × 36.2 × 76.8 | 1440 × 920 × 1951

52.0 × 28.0 × 59.1 | 1320 × 710 × 1500

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