

MPR-1412-PA  
MPR-1412R-PA

# Pharmaceutical Refrigerator

Accurate Temperature Control  
with Fast Recovery to Setpoint

48.2 cu.ft. | 1364 L

48.0 cu.ft. | 1359 L



MPR-1412-PA

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.



## 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.

## 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.



## 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

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 heavy-duty, fully-extendable painted steel pull-out drawers for more convenient access to stored product such as large bottles or reagent kits.



## 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.



Model MPR-1412R-PA

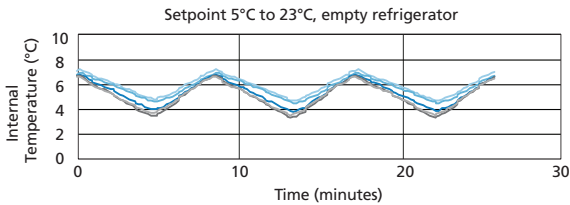
### Ideal for Storage or Process Instrumentation

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. Utilizes SNAP-compliant refrigerants and CFC-free insulation for environmentally responsible operation.

### 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.

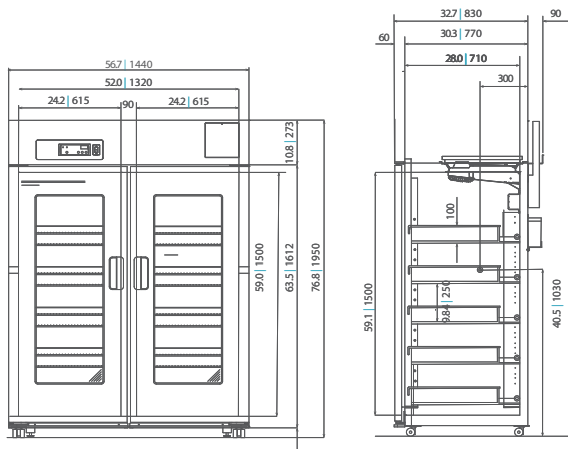
### Temperature Uniformity Data



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

### Dimensions

Unit : inch | mm



Model Number		MPR-1412	MPR-1412R
External Dimensions (W x D x H) <sup>1)</sup>	inches   mm	56.7 x 36.2 x 76.8   1440 x 920 x 1951	56.7 x 36.2 x 76.8   1440 x 920 x 1951
Internal Dimensions (W x D x H)	inches   mm	52.0 x 28.0 x 59.1   1320 x 710 x 1500	52.0 x 28.0 x 59.1   1320 x 710 x 1500
Volume	cu.ft.   liters	48.2   1364	48.0   1359
Net Weight	lbs   kg	547   248	637   287
<b>Performance</b>			
Temperature Control Range	°C	+2 to +23	
Uniformity <sup>2)</sup>	°C	±3	
Vaccine Storage Operating Temperature	°C	+2 to +8	
Factory Pre-Set Temperature	°C	+5	
BTU Nominal	Per hour	1310	
Evaporator Prevents Critical Product from Freezing	°C	Standard feature	
Noise Level <sup>3)</sup>	dB(a)	48	
<b>Control</b>			
Microprocessor Controller, Adjustable	°C	Increments of 0.1	
Digital Temperature Display		LED	
Controller Security		Lockable with key pad	
Electronics Diagnostics		Critical component failure warning	
<b>Refrigeration</b>			
Cooling Method		Uniformity forced air	
Internal Airflow for Precise Temperature		Electronically monitored evaporator	
Defrost Method Initiated Only as Needed		Air cooled, CFC free	
Refrigeration System		HFO R513-A (265 grams)	
Refrigerant		CFC/HFC free	
Insulation			
<b>Construction</b>			
Outer Door	qty	2- With dual 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	
<b>Alarms (V = Visual Alarm, B = Buzzer Alarm, R = Remote Alarm)</b>			
Power Failure <sup>4)</sup>		R (V-B optional)	
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	
<b>Electrical and Noise Level</b>			
Power Supply		115V, 1Ø, 60Hz, NEMA 5-15P 8 ft power cord	
Running Amps   Max Amps		3.7   4.3	
<b>Options</b>			
Blackout Panels to Cover Glass	1	BPANEL1411 (x2 MPR-72BP-PW)	
Circular Type Chart Recorders	1	MTR-G04A-PA	
Chart Paper	52 weeks	RP-G04-PW	
Battery kit for power failure alarm		MPR48B1	
<b>Optional Communication System</b>			
Wireless, Cloud-Based, Automatic Data Management		LabSVIFT™ (Gen 2)   LabAlert®*   V-SafeRX*	
4-20mA Output Modules		MTR-420MA-PW Equipment Powered   MTR420MAC- Equipment Powered *   MTR420MAL- Loop Powered *	
<b>Quality Management System</b>			
Certification		QPS Listed	
Warranty <sup>5)</sup>		3 years parts and labor	

<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> 3rd party testing lab using 9 temperature points with 24°C ambient temperature

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

<sup>4)</sup> Remote alarm activates at power failure, for messaging and logging must purchase accessory MPR-48B1-PW (V-B alarm).

<sup>5)</sup> Current warranty offered at time of printing and may be subject to change, US and Canada only.

\*Manufactured by others

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.

