

MPR-S500H-PA | 23A00P756

#### **Easy Access**

Argon insulated dual-pane sliding glass doors provide greater access to contents without the external clearance needed by conventional hinged doors. The sliding doors greatly reduce air transfer during door openings, minimize energy use and maintain stable internal temperatures throughout the cabinet. An integrated keyed lock provides added security.

# **Medical Refrigerator**

+2°C to +14°C

19.5 cu.ft. | 554 L 19.4 cu.ft. | 550 L

Life Science

Innovator Since 1966

MPR-S500H-PA | **23A00P756** MPR-S500RH-PA | **23A00P757** 

This medical refrigerator is purpose built to meet CDC requirements for vaccine and biologics storage. The sliding door configuration, affording easy access while maintaining stable internal temperatures throughout the chamber, is suitable for clinics, hospitals, distribution centers or pharmacies where frequent access is required.

#### Environmental Friendly SNAP Compliance

Clean, natural hydrocarbon [HC] refrigerants used in the refrigerator provide efficient cooling with low global warming potential (GWP) and zero ozone depletion potential (ODP). In addition, the combination of HC refrigerants with inverter compressor technology delivers low energy consumption of 0.82 kWh/ day based on factory testing.

#### Energy Saving Inverter Compressor Algorithm

The PHCbi brand proprietary inverter compressor algorithm [ICA] modulates the compressor motor speed according to temperature need. Unlike standard on/off compressors, the ICA uses less energy following door openings with swift recovery times. This provides stable uniform temperature during long-term storage and extended compressor life with less wear and tear than conventional compressor refrigerators.



### **Data Archiving**

Onboard data logs monitor and record minimum and maximum temperatures over 12- and 24-hour periods supporting CDC clinical recording recommendations. Temperature, alarm, door opening and closing data are retained for three months and are accessible for download via USB to ensure daily logs are complete.



### **Temperature Uniformity**

Cool air distribution throughout the cabinet assures temperature uniformity even at full load capacity. Shelves and drawers are designed to allow even circulation. The ICA technology drives fast temperature recovery upon each door opening. Airflow is directed to reduce condensation on the door glass. Detailed temperature mapping is available upon request.



#### Automated Evaporator Coil Defrost

Ice buildup on cooling coils forces the compressor to work harder. Comparable systems use a timed defrost, which may elevate temperatures. This model utilizes integrated sensors that monitor evaporator coil temperatures and automatically remove accumulated ice from the coils only when required. Temperature is maintained during the defrost cycle. There is no need to power down or empty contents.



Thomas Scientific is an authorized distributor for PHC Corporation of North America.

## **Medical** Refrigerator



#### Intuitive OLED Control Panel

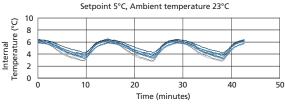
The microprocessor controller and OLED display provide convenient, secure user control with a six-digit keypad lock-out and large clear display that is easily read from across a room. Temperatures are displayed in 0.1°C increments, with minimum/maximum displays customizable for 12- or 24-hour periods. Alarm logs with userdefined limits are displayed and archived. LED cabinet light settings for on, off, delay-off or automatic with door opening.

Model MPR-S500RH-PA | **23A00P757** shown with wire shelves (left), sliding drawer racks (right).

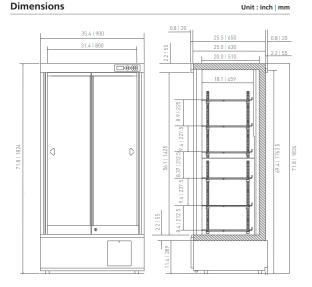
#### **Available Options**

Choose between alternate inventory configurations, including a combination of wire shelving and sliding drawer racks. A chart recorder installs in the cabinet base. A battery backup option provides power to the control panel display for up to 8 hours in the event of a power outage. A door blackout panel protects light-sensitive contents. See Options.

#### **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.



Model Number		MPR-S500H-PA   23A00P756	MPR-S500RH-PA   23A00P757
Exterior Dimensions (W × D × H) 1)	inches mm	35.4 × 25.5 × 71.8	
Interior Dimensions (W × D × H)	inches mm	31.4 × 20.0 × 56.1	800 × 510 × 1425
Volume	cu.ft.   liters	19.5 554	19.4 550
Net Weight	lbs   kg	300 139	320   145
Performance			
Warranty <sup>2)</sup>		3 years part	s and labor
Temperature Control Range 3)	°C	2 to	14
Control			
Controller		Microprocessor with	non-volatile memory
Digital Temperature Display		Digital (white graphic OLED), 1°C (increment of 0.1)	
Temperature Sensor		Thermistor	
Refrigeration			
Cooling Method		Fan forced air circulation	
Defrost Method		Electronically actuated cycle defrost	
Refrigerant		SNAP approved (R-600A), 45 g	
Insulation		PUF (rigid polyurethane foamed insulation)	
Construction			
Exterior Material		Painte	d steel
Interior Material		Painted steel	
Outer Doors	qty	2 (highly insulated double glass door with tempered glass)	
Outer Door Lock		Inclu	ided
Shelves	qty	6 (adjustable, wire) full width	6 (adjustable, wire) left side
Sliding Drawer Racks		-	5 right side
Shelf Dimensions (W × D)	inches   mm	30.7 x 16.5 781 x 420	16.9 x 16.5 430 x 420
Max. Load – Per Shelf	lbs   kg	110 50	44 20
Access Port	qty	(1) Sta	ndard
Access Port Position		Rear, middle back wall	
Access Port Diameter	inches   mm	1.2   30	
Casters	qty	4 (2 Leveling feet)	
Interior Light		LE	D
Accessories			
Key	set	х	2
Alarms (V=Visual, B=Buzzer, R=Remot	e Alarm, L=Logged)		
Power Failure 4)		F	{
High Temperature		V-B-L-R	
Low Temperature		V-B-L-R	
Door Open		V-B-L	
Electrical and Noise Level			
		115V 60Hz 10	1 NEMA 5-15P
Power Supply		115V, 60Hz, 1Ø, NEMA 5-15P, requires NEMA 5-15R receptacle	
		requires incluina .	-15R receptacle
Noise Level <sup>5)</sup>	dB(A)	4	
Noise Level <sup>5)</sup> BTU Output	dB(A) btu/hr		2
		4	2
BTU Output Options		4	2 35
BTU Output Options Circular Type Chart Recorders		4 78 MTR	2 35 2954
BTU Output Options Circular Type Chart Recorders Chart Paper	btu/hr	4 78 MTR C731	2 55 5954 3176
BTU Output Options Circular Type Chart Recorders Chart Paper Ink Pen		4 78 MTR C731 R2	2 255 2954 3176 52
BTU Output Options Circular Type Chart Recorders Chart Paper	btu/hr	4 78 MTR C731	2 255 2954 3176 52

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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.

<sup>1)</sup> External dimensions of main cabinet only, excluding external projections. See dimensions' drawings on website for full details.
 <sup>2)</sup> Current warranty offered at time of printing and may be subject to change; US and Canada only.
 <sup>3)</sup> Air temperature measured at refrigeration compartment center and freezer compartment center, ambient temperature

<sup>43</sup> Second Barm includes optional, audible, power failure alarm with battery pack MPR-48B2-PW (B-R alarm).
<sup>5)</sup> Nominal value - background noise 20 dB(A).



LabAlert<sup>®</sup> Monitoring System

MTR-420-MAC

QPS Listed

#### PHC Corporation of North America PHCNA\_AS | 11 | 07 | 2023 | 12846.1 | Rev 1 | vf

Wireless, Cloud-Based,

Certification

+35°C, no load.

Automatic Data Management Self-Powered Output Module

Quality Management System

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