

Specifications	Model No.			
115 V, 60 Hz	MPR-1014-PA	—	MPR-514-PA	—
220 V, 60 Hz	MPR-1014-PK MPR-1014-PR	MPR-1014R-PK MPR-1014R-PR	MPR-514-PK MPR-514-PR	MPR-514R-PK MPR-514R-PR
220 V/230 V/240 V, 50 Hz (CE)	MPR-1014-PE	MPR-1014R-PE	MPR-514-PE	MPR-514R-PE
Temperature range	2°C to 14°C (Ambient temperature -5°C to 35°C)			
External dimensions (W x D x H)*1	1800 x 600 x 1790 (mm) / 70.9 x 23.6 x 70.5 (inch)		900 x 600 x 1790 (mm) / 35.4 x 23.6 x 70.5 (inch)	
Internal dimensions (W x D x H)	1700 x 465 x 1300 (mm) / 66.9 x 18.3 x 51.2 (inch)		800 x 465 x 1300 (mm) / 31.5 x 18.3 x 51.2 (inch)	
Effective capacity	1033 liters [36.4 cu.ft.]	1029 liters [36.3 cu.ft.]	489 liters [17.3 cu.ft.]	486 liters [17.2 cu.ft.]
Net weight	246 kg [542 lbs.]	258 kg [569 lbs.]	141 kg [300 lbs.]	147 kg [313 lbs.]
Exterior cabinet	Galvanised steel with baked on finish			
Interior cabinet	Stainless steel			
Outer door	2 sliding doors, Double layer glass with heat reflection film			
Cabinet insulation	Rigid polyurethane foamed-in-place (HCFC free)			
Outer door lock	1			
Shelves & Sliding racks	10 polyester-coated wire shelves Load: 50 kg per shelf	5 polyester-coated wire shelves Load: 50 kg per shelf 10 polyester-coated sliding racks Load: 20 kg per rack	5 polyester-coated wire shelves Load: 50 kg per shelf	5 polyester-coated wire shelves Load: 20 kg per shelf 5 polyester-coated sliding racks Load: 20 kg per rack
Cooling method	Forced cool air circulation			
Evaporator	Fin and tube			
Condenser	Fin and tube		Wire and tube, Tube on sheet	
Compressor	Hermetic type, output: 270 W		Hermetic type, output: 200 W	
Refrigerant	HFC and HFO combined			
Fan motor	for cooling For cooling: output 3 W x 2		For cooling: output 3 W x 1	
	for condensing For condenser: output 4 W		—	
Defrosting	Forced type, fully automatic			
Defrost heater	141 W		73.8 W x 2	

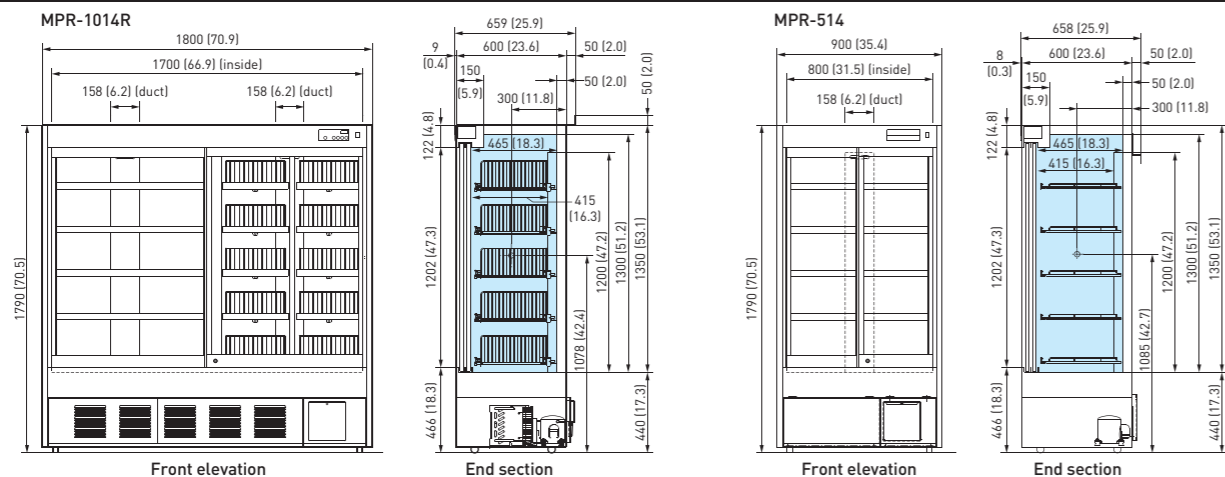
**Caution:** PHC Corporation guarantees this product under certain warranty conditions. However, please note that PHC Corporation shall not be responsible for any loss or damage to the contents stored in the product.

• Appearance and specifications are subject to change without notice.

\*1 Exterior dimensions of main cabinet only - see dimension drawings showing handles and other external projections.

#### Dimensions

Unit: mm (inch)



#### Options

• Automatic Temperature Recorders

	MTR-G04C-PE/MTR-G04A-PA (Circular Type)	MTR-0621HL-PE/MTR-0621LH-PA (Strip Chart Type)
Recording paper	RP-G04-PW	RP-06-PW
Recorder fixing	MPR-S7-PW	MPR-S30-PW

• External mounting Power Failure Alarm

**MPR-48B1-PW**

• Data Acquisition System

**Interface board MTR-L03-PW for LAN**

**Interface board MTR-480-PW for RS-232C/RS485**

For the data acquisition system MTR-5000 user only.



Preservation (freezers, refrigerators) and Culturing (incubators) Equipment

The management of the design, development, production, sales support, and servicing of the above.

PHC Corporation, Biomedical Division

1-1-1 Sakada, Oizumi-machi, Ora-gun, Gunma 370-0596, Japan



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

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**PHCbi**

**Pharmaceutical Refrigerators**  
MPR-1014/MPR-1014R  
MPR-514/MPR-514R

Preservation  
sub-zero

## Pharmaceutical Refrigerators

Spacious capacity meets versatile requirements of pharmaceutical refrigeration, from small-variety packages to large-variety packages.



MPR-1014R

MPR-514

PHC Corporation, Biomedical Division

Life Science  
Innovator  
Since 1966



# Stable and reliable environment control—the key to high-precision performance for exacting storage or research requirements

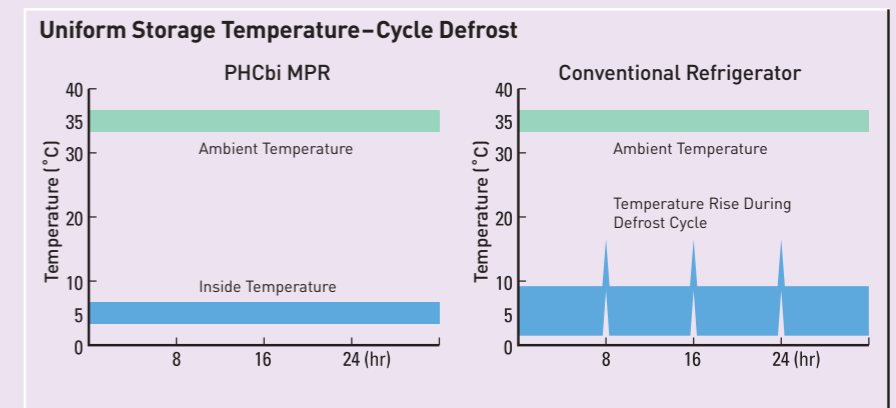
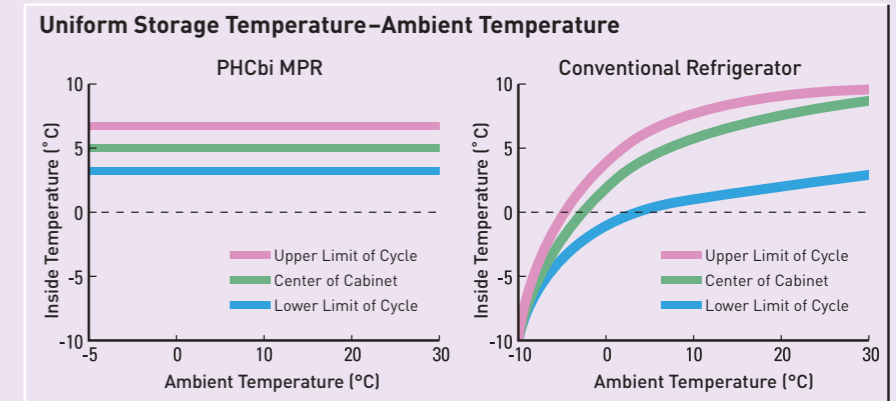
Several factors are important to assure the quality of pharmaceuticals, samples and reagents. These are storage temperature, expiry date, exposure to ultraviolet light and humidity. Of these the most important is storage temperature. If the temperature is too high, chemical changes can occur which affect the quality of the materials. If the temperature is too low, there is a risk of structural changes brought about by freezing. Narrow and uniform temperature control without regard to ambient conditions is very important. Don't compromise your results!



**MPR-1014R**  
Equipped with sliding racks.  
Effective capacity: 1,029 L (36.3 cu. ft.)  
R-type:  
The left side is wire shelves.  
The right side is 5 sliding racks x 2



**MPR-514R**  
Effective capacity: 486 L (17.2 cu. ft.)  
The left side is wire shelves.  
The right side is sliding racks.



Features of the MPR-514(R) and MPR-1014(R)

User-friendly design: easy-viewing, easy-opening, and energy-saving

## Uniform storage unaffected by ambient temperature

### Microprocessor controlled

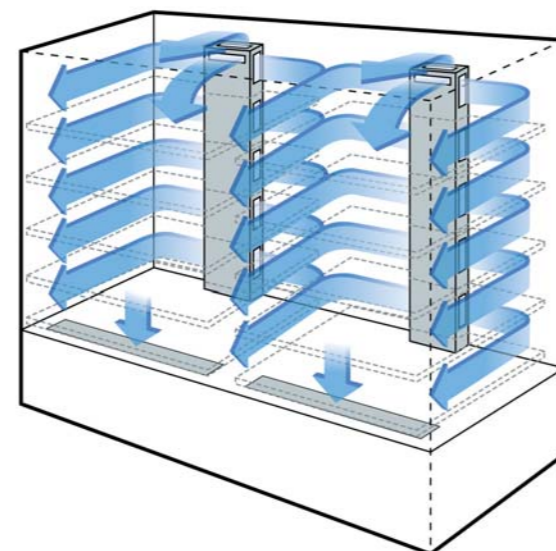
An electronic sensor accurately monitors chamber temperature and feeds the information to the micro-processor for precise control at preset temperature. Fans ensure gentle air circulation to provide uniform top to bottom temperature control after frequent door openings. PHCbi's easily calibrated, reliable and stable controls make validation easier.

### Remarkable cooling efficiency

A highly efficient hermetic compressor, specially designed and developed by PHCbi, is utilized to provide powerful and rapid cooling to maintain proper temperature level.

## Plenums

PHCbi's plenum design features uniform cold air flow distribution throughout the chamber to ensure temperature uniformity— essential for validated storage requirements.



## Ergonomic design

The ergonomic design of the MPR series refrigerators provides a clear view of stored items through the large framed windows. The slim profile allows for easy-reach retrieval of your products. Users can choose from two types to suit their needs; one with all wire shelves or one with sliding racks on one side.



## Double-sensor temperature management

The double-sensor control system with alarm-exclusive sensor added to the temperature control sensor always monitors the precise chamber temperature.

## Safety is a PHCbi standard

Even the best designed refrigerator must be prepared for the unexpected.

### ● Cabinet construction

View Window design with protective film to prevent shattered glass from scattering onto the floor. Also features key locked doors.

### ● Control safety devices

Audible and flashing LED visual alarms alert you to the unlikely event of either a high or low temperature condition.

An over-shooting prevention circuit automatically switches off the fan motor or heater, if the inside temperature rises abnormally.

### ● Comprehensive alarms

In addition to Low / High temperature alarms and door ajar alarm, power failure alarm can be installed as an option. Remote alarm terminal is also provided as standard.



Control Panel

## Worry-free cycle defrosting system

With PHCbi's cycle defrost system, defrosting is performed automatically during compressor "off" cycles, and by sensing frost levels. This way defrosting is performed only when required, further protecting the contents against unnecessary temperature rise. The defrosting heater also acts as an emergency heat source to prevent samples from freezing.

## HFC refrigerant & HCFC-free insulation

PHCbi biomedical equipment is designed for low environmental impact. The MPR-514 and 1014 series use HFC refrigerant and the foamed-in-place insulation is HCFC free.