



MPR-N250FH-PE

# Environmentally Friendly Storage Solution

Naturally occuring 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 and lower running costs.

# PERFORMANCE

#### Environmentally Friendly

Ideal for laboratories looking to reduce their carbon footprint and environmental impact to comply with sustainability policies.

# MPR Natural Refrigerant Pharmaceutical Refrigerator with Freezer



# 259 L (R: 179 L / F: 80 L)

Providing a complete storage solution; refrigerator and freezer in one unit. The N250FH-PE combines high-performance refrigeration with a -30°C freezing environment within a small footprint for flexible, reliable and convenient sample storage. Natural refrigerants minimise environmental impact for a sustainable storage solution.

#### Superior Uniformity

The refrigerator provides superior uniformity throughout. Temperatures remain stable wherever products are stored, even in a fully loaded chamber. The refrigerator is engineered to prevent inadvertent freezing of temperature sensitive vaccines.

# Precise Control & Intelligent Monitoring

A microprocessor controller and accurate sensors maintain precise refrigerator and freezer temperatures that are displayed simultaneously on an OLED panel. A USB port provides simple and convenient transfer of logged data to a PC including temperature, door opening times and alarm history.

#### Temperature Distribution

The refrigerator includes a high performance refrigeration system with a forced air, back

wall plenum. This provides even, horizontal airflow across the solid, adjustable glass shelves at each shelf level. A uniform freezer temperature is maintained through a cold wall refrigeration system with natural circulation.





## Two Temperatures, One Unit

Secure storage at both freezing and refrigerated temperatures, within a minimal footprint, is an ideal solution for installation in smaller spaced.



# **Pharmaceutical** Refrigerators with Freezer

# **Optimized for Superior Usability**

One unit with dual temperature control requires minimal installation space. Two-door design reduces air loss during door opening and makes efficient use of space in front of the unit. Two specially designed compressors offer quiet operation for installation in busy working environments without disruption.

# Temperature controllability

The OLED panel has good visibility and intuitive operation. It displays detailed temperatures with increment of 0.1°C, minimal and maximal temperature for every 24 hours and can show refrigerator and freezer temperature simultaneously.



The USB port and log functions simplifies temperature data management.

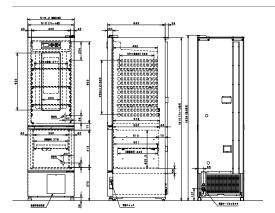
# Safe & Secure Storage

Multiple safety systems such as high/low temperature audible and visual alarms, remote alarm and door open alarm are standardly equipped. The password-protected control panel provides security and minimises risk of accidental changes. Optional temperature recorders for the refrigerator and freezer compartment can be installed.

## Ease Of Use



Removable glass shelves inside the refrigerator compartment enables easy cleaning. Clear visibility inside the refrigerator compartment is established by a LED light.



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Model Number		MPR-N250FH-PE	
		Refrigerator	Freezer
Dimensions			
External Dimensions (W x D x H) <sup>1)</sup>	mm	510 x 640	) x 1810 <sup>1)</sup>
Internal Dimensions (W x D x H)	mm	430 x 516 x 903	390 x 501 x 413
Volume	litres	179	80
Net Weight	kg	9	5
Performance			
Temperature control range <sup>2)</sup>	°C	2~ 14 2)	-20~ -30 <sup>2)</sup>
Control			
Controller		Microprocessor with	non-volatile memory
Display		Digital (White graphic Organic LED), 1 °C (increment of 0.1)	
Temperature sensor		Thermistor	
Refrigeration			
Cooling Method		Fan forced air circulation	Direct cooling
Defrost method		Cyclical defrost	Manual
Refrigerant		R-600a (HC refrigerant)	R-290 (HC refrigerant)
Insulation		PL	JF
Construction			
Exterior Material		Painted Steel	
Interior Material		ABS Resin	Electro-galvanized steel plate, Polyester resin baked
Outer Doors	qty	Electro-galvanized steel plate, Polyester resin baked with triple glass window	Electro-galvanized steel plate, Polyester resin baked
Outer Door Lock		Y	Y
Shelves	qty	Tempered glass (3)	Coated steel wires (1)
Max. load - per shelf	kg	20	10
Max. load - total	kg	10	)5
Access Port	qty	Two ports available R(1), F(1)	
- Position		Back	
- Diameter	Ømm	30	
Casters	qty	4	
Interior light		LED	-
Alarms	(R	: = Remote Alarm, V = Visual A	larm, B = Buzzer 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	
Electrical and Noise Level			
Power Supply	V	230V 50Hz single phase	
Noise Level <sup>4]</sup>	dB [A]	4	0
Options			
Temperature recorders		-	-
Temperature chart recorders		MTR-0621LH-PE	-
- Chart paper		RP-06-PW	-
- Recorder housing		MPR-S30W-PW	-
Circular type <sup>5)</sup>		MTR-G3504C-PW	
- Chart paper		RP-G3504-PW	
- Ink pen		PG-RB-PW	
- Recorder housing		MPR-S7-PW	
Continuous strip type		-	MTR-4015LH-PE
- Chart paper		-	RP-40-PW
- Recorder housing		- MPR-S30-PW	
Battery kit for power failure alarm		MPR-48B2-PW <sup>3]</sup>	
Wired Shelf for freezer (set of two)		-	MPR-250ST-PW
Door window blanking plates		MPR-25BP-PW	-

Appearance and specifications are subject to change without notice.

PUF = Rigid polyurethane foamed insulation V = Visual alarm B = Buzzer alarm M = Message R = Remote alarm

<sup>11</sup> Exterior dimensions of main cabinet only, excluding handle (no handle available) and other external projections - See dimensions drawings on website for full details

- website for full details <sup>3</sup> Air temperature measured at refrigeration compartment centre and freezer compartment centre, ambient temperature +30°C, no load <sup>3</sup> Requires optional battery kit for power failure alarm MPR-48B2-PW <sup>4</sup> Nominal value Background noise 20dB[A]
- <sup>5</sup> MTR-G3504-PW has 2 pens (red/blue) per recorder, therefore it can register temperatures inside the freezer as well in the refrigerator