

PF-L5181W-PA

High Performance Undercounter Freezer

-15°C to -25°C Undercounter Freezer

5.0 cu.ft. | 142 L



PF-L5181W-PA

The PF-L5181W-PA high performance undercounter freezer is designed to maintain temperatures between -15°C and -25°C with a tight uniformity of $\pm 5^\circ\text{C}$ for storing critical vaccines and biologics. This model is engineered to meet CDC guidelines in a small footprint. Precise temperature control and uniformity protect vaccine and biologic viability whether the unit is loaded or empty.

Temperature Control Precision

This freezer features precise temperature control engineered to meet the current and evolving criteria for vaccine storage while requiring less energy than traditional undercounter freezers. The purpose-built PF-L5181W-PA is designed to maintain the high performance necessary for valuable inventory using the latest inverter compressor speed technology for optimum control.

Ease of Use and Accessibility

With a compact footprint, the PF-L5181W-PA is designed for functional workspaces and fits under most tables, cabinets and lab benches. The solid door protects light-sensitive materials. If a door is left ajar, the self-closing mechanism mitigates scenarios that could result in lost product. An alarm provides an even deeper level of protection. An optional stacking accessory is available to maximize storage capacity when space constraints become a concern.

Temperature Uniformity Even When Loaded

Many high performance freezers can maintain precise temperatures when they are empty. The PF-L5181W-PA has been designed to maintain high performance temperature uniformity of $\pm 5^\circ\text{C}$ even when loaded, as often occurs during peak vaccine season. This model features evaporator shelving and forced air circulation within the chamber to ensure swift temperature pull down upon startup and rapid recovery after door openings.



Energy and Sustainability

This undercounter freezer provides energy efficiency and sustainability without compromising performance. Traditional refrigerants have been replaced with environmentally friendly natural refrigerants to meet Significant New Alternatives Policy (SNAP) guidelines and the AIM Act of 2020 for low global warming potential and no ozone-depleting substances.



Microprocessor Control and Alarm

The unit has a door-mounted control with an easy to view LED display that features preset automatic alarm tracking around the temperature setpoint. The alarm is set at 3°C above and below setpoint, consistent with vaccine and high-value product storage requirements.

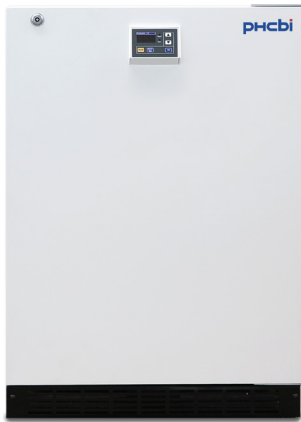


Manual Defrost System

The PF-L5181W-PA is a manual defrost high performance undercounter freezer. This ensures that sensitive frozen enzymes or vaccines are not exposed to temperature deviation common with freezers containing an auto defrost cycle.

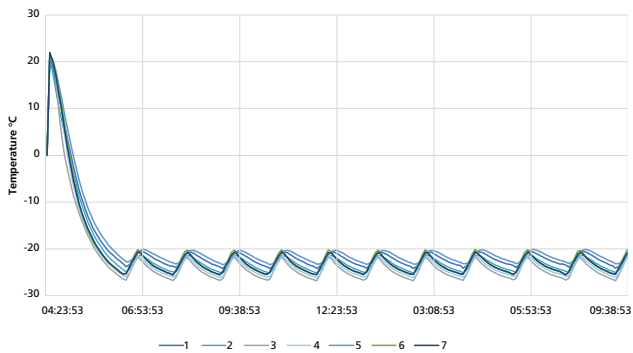
High Performance Undercounter Freezer

PF-L5181W-PA



PF-L5181W-PA

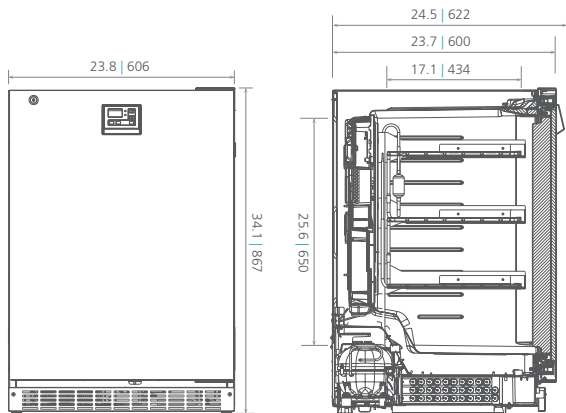
Pull Down and Steady State, -23°C Set Point



Temperature mapping is based on simulated 5 ml vaccine vials in 24°C ambient temperature

Dimensions

Unit : inch | mm



Model Number		PF-L5181W-PA
Exterior Dimensions (W x D x H) ¹⁾	inches mm	23.8 x 23.7 x 34.1 606 x 600 x 867
Interior Dimensions (W x D x H)	inches mm	19.9 x 17.1 x 25.6 507 x 434 x 650
Volume	cu.ft. liters	5.0 142
Net Weight	lbs kg	100 45
Performance		
Warranty ²⁾		2 years parts / labor
Cooling Performance ³⁾	°C	-15 to -25
Temperature Setting Range	°C	-15 to -25 in 0.1°C increments
Temperature Control Range ³⁾	°C	-15 to -25 in 0.1°C increments
Uniformity (Air Temperature)	°C	Better than ±5
Control		
Controller		Microprocessor
Display		LED
Security		Front panel anti-tamper lockout
Temperature Sensor		Thermistor
Refrigeration		
Refrigeration System		Direct contact evaporator shelving
Compressor	W	40 (hermetic, inverter design)
Refrigerant		R-600a
Defrost		Manual
Insulation Material, SNAP Compliant		HFO foamed-in-place
Construction		
Exterior Material		White PCM galvanized steel, polyester resin baked finish
Interior Material		HFO vacuum formed plastic
Outer Door	qty	1 electro galvanized steel
Key Lock	qty	1 door lock, top mounted with 2 keys
Shelves	qty	3, coated steel wire
Shelf Dimension (W x D)	inches mm	19.2 x 14.75 487 x 375
Access Port	qty	1 (standard)
Access Port Position		Right side of product
Access Port Diameter	inches mm	1.2 30
Leveling Feet	qty	4
Alarms (V=Visual, B=Buzzer)		
High Temperature		V (immediate), B (15 minute delay)
Low Temperature		V (immediate), B (15 minute delay)
Door Alarm		V (immediate), B (2 minute delay)
Sensor Failure		V (error code)
Electrical and Noise Level		
Power Supply		115V, 60Hz, 1Ø, NEMA 5-15R, requires NEMA 5-15R receptacle
Options		
Chart Recorder		MTRC958
Chart Paper		C740306REV
Chart Pens		R252
4-20mA Analog Output		MTR420MAL- loop powered
Stacking Kit		8330313110200
Keypad Electric Lock. Other Configurations Available.		ELKPHFRKIT
Optional Communication System		
Wireless, Cloud-Based, Automatic Data Management		LabAlert® Monitoring System

¹⁾ External dimensions of main cabinet only. Depth is 24.5" (622 mm) including the controller

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

³⁾ Air temperature measured at freezer center, ambient temperature +24°C, no load

Specifications are subject to change without notice.

For latest specification information contact PHC Corporation of North America at info@us.phcd.com.

Performance data herein is based on independent testing at time of publication



PHC Corporation of North America
1300 Michael Drive, Suite A, Wood Dale, IL 60191
Toll Free USA (800) 858-8442, Fax (630) 238-0074
www.phcd.com/us/biomedical