

# Pass-Thru Refrigerators

Pharmacy & Blood Bank



TrueBlue.  
Reliability & Support

i.Series® | Horizon Series™



# Pass-Thru Refrigerators designed specifically for healthcare and life science applications

Helmer Scientific high performance blood bank and pharmacy pass-thru refrigerators are a result of over 40 years of proven refrigeration solutions and attention to detail. Superior temperature uniformity, outstanding reliability, and exceptional benefits bring value every day, leaving you to focus on your critical work while your products receive our TrueBlue™ protection.

## Helmer Refrigerators Deliver

### High-Quality Craftsmanship

- Superior chamber temperature uniformity and quick recovery with heavy-duty, forced-air refrigeration system
- Temperature uniformity of  $\pm 1^{\circ}\text{C}$
- Operating temperature range from  $+2^{\circ}\text{C}$  to  $+10^{\circ}\text{C}$
- Helps meet USP797 Clean Room Requirements
- Bacteria-resistant powder coated exterior and interior for added security
- Sure-Seal self-closing door with magnetic closure eliminates broken door latches
- Drawer mid-stop catch ensures proper closure to maximize airflow, maintain temperature uniformity, and protect glass doors from slide throughs
- Adjustable LED lighting provides energy-efficient illumination with auto-on feature and ON/OFF switch
- Hospital grade plug enhances electrical safety/serviceability

### Secure Monitoring for a Safe Storage Environment

- i.C3® with 7" (177mm) full-color touchscreen (i.Series®)
- Microprocessor temperature controller with built-in alarm monitor (Horizon Series™)
- Key lock
- Password protected settings (i.Series)
- Chart recorder (Blood Bank)
- Meets AABB, ARC, FDA, EU Blood Directive 2004/33/EC, and Part 4 of the Blood Safety and Quality Regulation 2005 standards for blood storage at  $4^{\circ}\text{C}$

### Designed for Convenience and Performance

- Single and double door models 26.5 cf (750 L) and 58 cf (1642 L)
- ADA compliant door handles
- Position flush with a countertop, cabinet, or other equipment with no additional clearance required
- Recessed floor and liquid-tight drawers contain spills for easy clean-up and maintain the integrity of other products stored in the refrigerator
- Rechargeable battery backup (i.C3)

# More choices

## Product Line Overview

Helmer offers two distinct lines of pass-thru refrigerators. Both lines offer high quality construction and attention to detail throughout. The primary difference between lines is the means of monitoring and control.

### i.Series®

The i.Series features the i.C<sup>3</sup>, a door-mounted touchscreen information center with constant temperature monitoring and control. It is easy to view and provides status of critical information, alarms, and events in one secure location.



### Horizon Series™

The Horizon Series offers a digital microprocessor temperature controller with a built-in alarm.



## Pass-thru Refrigerator Selection Guide

+2°C to +10°C Factory set to +4°C

Select the Optimal  
Capacity & Design

		i.Series®		i.Series®		Horizon Series™		Horizon Series™	
		iPR225	iPR456	iB225	iB456	HPR225	HPR456	HB225	HB456
Application Cabinet		Pharmacy Pass-thru	Pharmacy Pass-thru	Blood Bank Pass-thru	Blood Bank Pass-thru	Pharmacy Pass-thru	Pharmacy Pass-thru	Blood Bank Pass-thru	Blood Bank Pass-thru
Capacity	cu ft / liters	26.5 750	58 1642	26.5 750	58 1642	26.5 750	58 1642	26.5 750	58 1642
Storage	standard	3 drawers 3 shelves	6 drawers 6 shelves	6 drawers	12 drawers	3 drawers 3 shelves	6 drawers 6 shelves	6 drawers	12 drawers

# Outstanding features at-a-glance

## Refrigeration System

- » Heavy-duty, air-cooled refrigeration system with non-CFC R134A refrigerant provides high efficiency and is environmentally friendly
- » Forced-air circulation maintains chamber uniformity and provides quick recovery after door openings
- » No defrost cycle required to maintain constant temperature
- » Auto condensate evaporation
- » Evaporator fan(s) shut off during door openings to maintain stable temperatures

## Cabinet Construction

- » Bacteria-resistant powder coated interior and exterior, and door handles
- » Covered top for placement in clean room
- » Superior engineered frame for maximum rigidity
- » Dual-pane glass door(s) with ADA compliant full-length handles
- » Innovative self-closing Sure-Seal door system with magnetic seal
- » Key lock
- » LED lighting with control panel mounted switch
  - Auto ON/OFF (i.Series)
- » Minimum of 2" (51mm) non-CFC foamed urethane insulation
- » Dual, swivel locking casters
- » Access port located in top of cabinet for external monitoring probe(s)
- » Integrated evaporation tray in base of unit
- » Rechargeable battery is environmentally friendly and long-lasting (i.C<sup>3</sup>)
- » Recessed floor contains spills for easy clean-up
- » Hospital grade plug and cord

Automatic high and low alarm tests heat and cool probes at the touch of a button, safely testing probes without affecting chamber temperature, while saving valuable time.





## Storage

- » **Pharmacy Models**
  - » Adjustable shelves
  - » Side and rear guards prevent items from falling off shelves
- » **Pharmacy & Blood Bank Models**
  - » Adjustable, two-way, solid stainless steel pull-out drawers
  - » Sure-Grip coordinated drawer handles with built-in ledge for labels (i.Series)
  - » Durable, liquid-tight construction for containment of spills
  - » Stainless steel standards guard against rust and corrosion
  - » Drawer mid-stop catch ensures proper closure to maximize airflow, maintain temperature uniformity, and protect glass doors from slide-throughs
  - » Easy access to inventory with fully extendable drawer slides
  - » Scratch-Guard edge protectors keep glass door from being scratched by drawers
  - » Tube-Guard drawer shields minimize the risk of tube damage in the drawer

## Chart Recorder

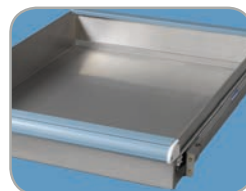
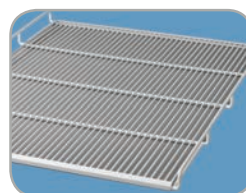
Blood Bank Pass-thru Refrigerators include a 4" (102mm) chart recorder with 7-day circular charts

- » Inkless, pressure-sensitive chart paper
- » Battery backup
- » Touch button controls for chart changes and calibration

Temperature Control and Monitoring	
i.Series®	Horizon Series™
	
<b>Exclusive i.C³® User Interface</b>	<b>Microprocessor-based controller with alarm/monitor</b>
<ul style="list-style-type: none"> <li>· 7" (177mm) full-color, door-mounted touchscreen</li> <li>· Automatic high/low alarm testing (Peltier based)</li> <li>· USB ports (2) for download/upload/upgrade</li> <li>· Optional RS-232 data port</li> <li>· Dry contact alarm connection</li> <li>· Password protected settings</li> <li>· Dual alarm probes, stainless steel in product simulation bottle</li> <li>· Digital temperature display / °C or °F</li> <li>· Event log displays date, time, and temperature data</li> <li>· Compressor log displays compressor temperature performance</li> <li>· Interactive temperature graph</li> <li>· Min/max display and reset</li> <li>· Digital calibration</li> <li>· Rechargeable battery backup</li> <li>· Date and time display</li> <li>· Alarm mute with adjustable ring-back interval</li> <li>· Adjustable alarm volume</li> <li>· Four alarm tones</li> <li>· High and low temperature alarms</li> <li>· Door ajar alarm</li> <li>· Power failure alarm</li> <li>· Condenser temperature alarm</li> <li>· Ethernet<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>· LED digital display, top bezel mounted</li> <li>· Manual alarm test</li> <li>· Dry contact alarm connection</li> <li>· Single alarm probe, stainless steel in product simulation bottle</li> <li>· LED temperature display / °C or °F</li> <li>· Min/max display and reset</li> <li>· Digital calibration</li> <li>· Battery backup</li> <li>· Alarm mute with 5-minute ring-back interval</li> <li>· Alarm silence with key switch</li> <li>· High and low temperature alarms</li> <li>· Door ajar alarm</li> <li>· Power failure alarm</li> </ul>
<sup>1</sup> Via customer developed software	

## Configurability

A number of high-performance options and accessories are available for pass-thru refrigerators. Storage can be customized with various combinations of shelves and two-way roll-out baskets or pull-out drawers. Configured options include heated glass doors which reduce condensation. Storage trays are also available to organize medicines and pharmaceuticals. See page 8 for a complete list of options and accessories.



Pass-Thru Refrigerator shown with shelves, roll out baskets, and storage trays



# Exclusively on i.Series®

## i.C³® Information Center

The i.C³ Information Center provides constant temperature monitoring and multiple information logs while offering security features to keep settings safe. It consolidates the refrigerator or freezer information in one convenient location and allows the user to optimize performance with just a fingerstroke. The icon driven monitoring system features a door mounted 7" (177mm) full-color touchscreen ergonomically angled for easy viewing.

The i.C³ Information Center includes:

### System Status Console

*Snapshot of current conditions*

Monitor the status of the unit with one quick glance at the home screen.

#### *Status Available*

- » Current temperature
- » Current alarm conditions and alerts in progress
- » Unacknowledged alarms
- » Minimum and maximum temperatures
- » Historical temperature data



### Information and Event Center

*Performance history*

All the information you need is one touch away. The interactive temperature graph provides a visual history of performance and a shortcut to the event log with detailed status information. Event acknowledgement can be captured on-screen complete with signature, date, and time-stamp.

- » Event status, start and end times
- » Door opening status
- » Min/Max temps during alarm conditions
- » 7 and 1-day graph view



### Guardian Plus Protection

*Protect settings and limit access*

Password protected setpoints ensure that proper temperatures are maintained, keeping products secure. With the addition of optional Integrated Access Control, access to the refrigerator or freezer can be secured by an electromagnetic lock controlled by PIN entry.

- » 100 User IDs can be set up directly from the i.C³ and programmed with an individual access PIN
- » Access Control keypad can be set as an alternative Home Screen
- » Access Control log provides an audit trail of door entries and includes the User ID, Date, Time, Duration, and Method of Entry
- » Key override



### Data Transfer Center

*Export data with ease*

Temperature, event, and optional access control data is simply exported via the USB port in the side of the i.C³ Information Center and can be opened in a spreadsheet program. Firmware updates can also be uploaded.

# Specifications

Model/Series	Doors	Bag Capacity <sup>1</sup>	Volume (cu ft /liter)	Interior Dimensions (w x h x d) (in/mm)	Exterior Dimensions (w x h x d) (in/mm)	Shelves	Drawers	Electrical Voltage (Hz)	Amps (FLA)	Net Weight lb / kg	Warranty <sup>2</sup>
<b>Pharmacy Pass-thru Refrigerators</b>											
Temperature Range +2° to +10°C, factory set to +4°C											
<b>iPR225</b> i.Series	2	N/A	26.5 750	24.75 x 58.25 x 32 629 x 1480 x 813	29.5 x 80 x 36 750 x 2032 x 915	3	3	115 (60) 230 (50) 230 (60)	9.25 5.1 5.8	534 243	Rel.i™ Plus 7/2/1
<b>HPR225</b> Horizon Series	2	N/A	26.5 750	24.75 x 58.25 x 32 629 x 1480 x 813	29.5 x 80 x 36 750 x 2032 x 915	3	3	115 (60) 230 (50) 230 (60)	9.25 5.1 5.8	523 238	Rel.i™ 5/2/1
<b>iPR456</b> i.Series	4	N/A	58 1642	55 x 58.25 x 32 1397 x 1480 x 813	59.25 x 80 x 36 1505 x 2032 x 915	6	6	115 (60) 230 (50) 230 (60)	13.25 7.8 8.2	797 362	Rel.i™ Plus 7/2/1
<b>HPR456</b> Horizon Series	4	N/A	58 1642	55 x 58.25 x 32 1397 x 1480 x 813	59.25 x 80 x 36 1505 x 2032 x 915	6	6	115 (60) 230 (50) 230 (60)	13.25 7.8 8.2	786 357	Rel.i™ 5/2/1
<b>Blood Bank Pass-thru Refrigerators</b>											
Temperature Range +2° to +10°C, factory set to +4°C											
<b>iB225</b> i.Series	2	432	26.5 750	24.75 x 58.25 x 32 629 x 1480 x 813	29.5 x 80 x 36 750 x 2032 x 915	0	6	115 (60) 230 (50) 230 (60)	9.25 5.1 5.8	579 263	Rel.i™ Plus 7/2/1
<b>HB225</b> Horizon Series	2	432	26.5 750	24.75 x 58.25 x 32 629 x 1480 x 813	29.5 x 80 x 36 750 x 2032 x 915	0	6	115 (60) 230 (50) 230 (60)	9.25 5.1 5.8	568 258	Rel.i™ 5/2/1
<b>iB456</b> i.Series	4	864	58 1642	55 x 58.25 x 32 1397 x 1480 x 813	59.25 x 80 x 36 1505 x 2032 x 915	0	12	115 (60) 230 (50) 230 (60)	13.25 7.8 8.2	852 387	Rel.i™ Plus 7/2/1
<b>HB456</b> Horizon Series	4	864	58 1642	55 x 58.25 x 32 1397 x 1480 x 813	59.25 x 80 x 36 1505 x 2032 x 915	0	12	115 (60) 230 (50) 230 (60)	13.25 7.8 8.2	841 382	Rel.i™ 5/2/1

<sup>1</sup> Capacity based on blood bag volume of 450 ml · Meets AABB, ARC and FDA standards for blood storage  
Specifications subject to change · Certified to applicable UL and CSA standards by a NRTL  
Technical Data Sheets for all Pharmacy and Blood Bank Pass-thru Refrigerators are available at [www.helmerinc.com](http://www.helmerinc.com)  
Published interior volumes are nominal; usable cu ft (liters) capacity may be offset by protrusions into cabinet.  
<sup>2</sup>Warranties applicable in the U.S. and Canada. For international warranty information, contact distributor

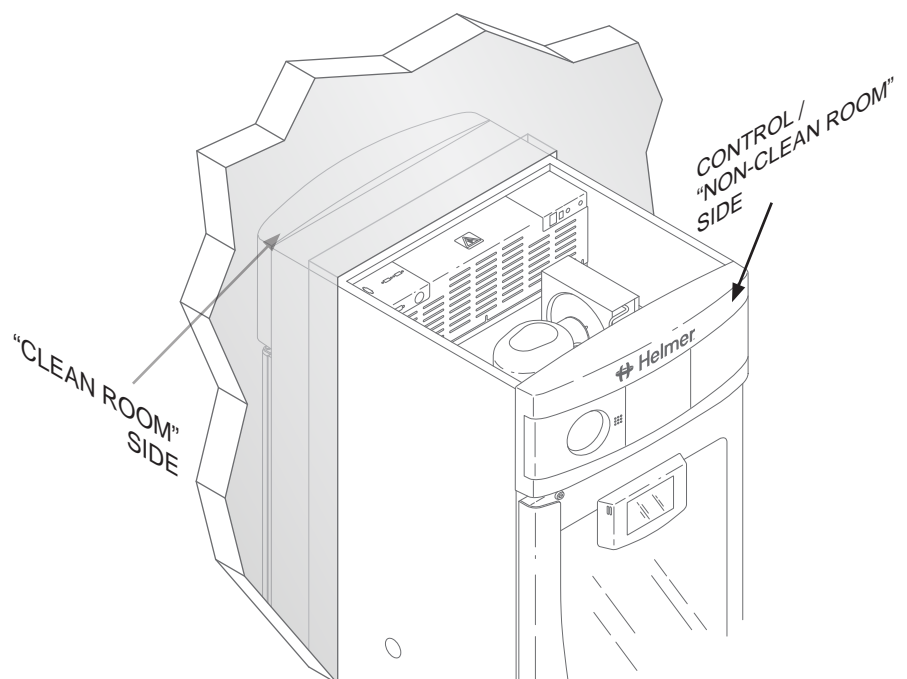


## Placement

Pass-Thru refrigerators can be placed between two rooms. The opening should be sized to fit the width of the cabinet. The header above



the opening can be built so that it is flush with the top of the cabinet. The refrigerator should be located front to back so that the header resides above the covered portion of the top of the unit. Minimum overhead clearance of 8" (204mm) is required on the open "non-clean room" side of the cabinet.



# High-Performance Options & Accessories

Options and accessories have been specifically designed to enhance the performance of Helmer Scientific refrigerators and freezers. Some options are factory installed and must be specified with your original order. Please contact your sales representative for more information.

## **Roll-out Baskets**

Wire baskets are two-way with fully extendable slides and are offered as an alternative to standard shelving.

## **Shelves**

Additional shelves are adjustable, and designed to fit individual cabinets.

## **Pull-out Drawers**

Stainless steel two-way drawers are liquid-tight. (i.Series and Horizon Series)

## **Solid Doors**

Ideal for storage of light sensitive products.

## **Heated Glass Doors**

Removes fogging and condensation in humid environments

## **Finish Trim Kit**

The Finish Trim Kit provides a perimeter frame around the Pass-Thru Refrigerator.

## **Skirt**

Mounts to bottom of refrigerator on clean room side, sealing space between refrigerator and floor

## **Access Ports**

Side-wall access port can be factory installed, 1.75" (45mm).

## **Temperature Chart Recorders**

Optional 4" (102mm) chart, 7-day, inkless standalone temperature recorder. Includes battery backup and box of 52 charts.

- » Chart Recorder Paper  
4" (102mm) diameter, -5°C to +20°C, package of 52 (ref)

## **Remote Alarms**

For audible and visual signal of an alarm condition. Extend existing alarms to remote locations within a facility. Operational up to 3000' (914m) from cabinet. Can be connected to a central alarm system.

## **Remote Lock Adapter Kits**

Special accessories that allow medication dispensing locks to be properly installed on Helmer Scientific refrigerators and freezers. Compatible with most systems. (225 models)

## **Storage Trays**

Package includes tray, dividers, and rails to simplify and organize storage areas.

## **Drawer Dividers**

Polycarbonate upright or angled dividers for use in pull-out drawers.

## **Leveling Feet**

Field-installable kit. Can be installed without tipping unit.

## **Left-hinged single door**

## **Stainless steel interior**

## **Heated Glass Door**

## **Solid Door**

## **Floor and Wall Bracket Kit**

## **IQ/OQ Equipment Validation Guide**

## **Temperature Validation**

## **Certificate of Calibration**

## **i.C<sup>3</sup> Screen Protectors**

## **USB Flashdrive**



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