Upright Refrigerators

Blood Bank

TrueBlue.
Reliability & Support

i.Series® | Horizon Series™

Helmer
SCIENTIFIC

Medical-grade refrigerators designed specifically for blood bank applications.

Helmer high-performance blood bank refrigerators are a result of over 37 years of proven refrigeration solutions and attention to detail. Superior temperature uniformity, outstanding reliability, and exceptional benefits bring value every day, leaving you free 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, air-cooled refrigeration system

» Temperature uniformity of +/- 1°C

» Bacteria-resistant powder coated exterior and interior provide added security

» Sure-Seal self-closing door with magnetic closure eliminates broken door latches

» No defrost cycle required so constant temperatures are maintained throughout the storage period

» 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 and optional access control

» Password protected settings (i.Series)

» Chart recorder

» 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°C

Designed for Convenience & Performance

» Single and double door models from 11 cf (326 L) to 56 cf (1586 L)

» ADA compliant full-length door handle(s)

» 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 i.C³ battery backup (i.Series)

More choices

Product Line Overview

Helmer offers two distinct lines for upright blood bank refrigerators. All 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.C³, 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.

Refrigerator Selection Guide
+2°C to +10°C Factory set to +4°C

Select the Optimal Capacity & Design		i.Series®					Horizon Series™				
		iB111	iB120	iB125	iB245	iB256	HB111	HB120	HB125	HB245	HB256
Application		Blood Bank	Blood Bank	Blood Bank	Blood Bank	Blood Bank	Blood Bank	Blood Bank	Blood Bank	Blood Bank	Blood Bank
Capacity	cu ft / liters	11 326	20.2 572	25.2 714	44.9 1271	56 1586	11 326	20.2 572	25.2 714	44.9 1271	56 1586
Blood Bag Capacity	bags	165	364	504	728	1008	165	364	504	728	1008
Storage	standard	5 drawers	7 drawers	7 drawers	14 drawers	14 drawers	5 drawers	7 drawers	7 drawers	14 drawers	14 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 of ±1°C 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, exterior, and door handle(s)

» Ergonomic Sure-Grip door handle is padded for comfort[1]

» Superior engineered frame for maximum rigidity

» Dual-pane glass door(s) with ADA compliant full-length handle

» Sure-Seal self-closing door with magnetic closure

» Key lock

» LED lighting with control panel mounted switch
    - Auto ON/OFF[1]

» Minimum of 2" (51mm) non-CFC foamed urethane insulation

» Swivel locking casters

» Access port located in top of cabinet for external monitoring probe(s)

» Recessed floor contains spills for easy clean-up

» Hospital grade plug and cord

Horizon Series

i.Series

i.Series

Storage

» Solid stainless steel pull-out drawers

» Sure-Grip coordinated drawer handles with built-in ledge for labels[1]

» Durable, liquid-tight construction for containment of spills

» Stainless steel drawer standards guard against rust and corrosion

» Easy access to inventory with fully extendable drawer slides

» Scratch-Guard edge protectors keep glass doors from being scratched by drawers

» Tube-Guard drawer shields minimize the risk of tube damage

Chart Recorder

4" (102mm) chart recorder with 7-day circular charts
  - Inkless, pressure-sensitive chart paper (-5°C to +20°C)
  - Battery backup
  - Touch button controls for chart changes and calibration

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.

[1] i.Series models

Temperature Control and Monitoring

i.Series®	Horizon Series™
 Alarm/Monitor	 **Alarm/Monitor**
Exclusive i.C³® Information Center	**Microprocessor temperature controller with alarm/monitor**
· 7" (177mm) full-color, door-mounted touchscreen	· LED digital display, top bezel mounted
· Automatic high/low alarm testing (Peltier based)	· Manual alarm test
· USB ports (2) for download/upload/update	
· Optional RS232 data port	
· Dry contact alarm connection	· Dry contact alarm connection
· Password protected settings	
· Dual alarm probes (stainless steel in product simulation bottle)[1]	· Alarm probe (stainless steel in product simulation bottle)
· Digital temperature display of upper and lower chambers[1] / °C or °F	· LED temperature display / °C or °F
· Event log displays date, time, and temperature data	
· Compressor log displays compressor temperature performance	
· Interactive temperature graph	
· Min/max available via download	· Min/max display and reset
· Digital calibration	· Digital calibration
· Rechargeable battery backup	· Battery backup
· Date and time display	
· Alarm mute with adjustable ring-back interval	· Alarm mute with 5 minute ring-back interval
· Adjustable alarm volume	· Alarm silence with key switch
· Four alarm tones	
· High and low temperature alarms	· High and low temperature alarms
· Door ajar alarm	· Door ajar alarm
· Power failure alarm	· Power failure alarm
· Condenser temperature alarm	
· RJ45 hub[2]	

[1] 11 cu ft (326 liter) models: single alarm probe and upper temperature display
[2] For special applications

Configurability

A number of high-performance options and accessories are available for blood bank refrigerators. Storage can be customized with various combinations of shelves, roll-out baskets, pull-out drawers, or locking drawers. Configured options include heated glass doors which reduce condensation. Drawer dividers are also available to organize blood bags. See page 7 for a complete list of options and accessories.

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 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
- » Any alerts in progress
- » Unacknowledged alarms
- » 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 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.

High-Performance
Options & Accessories

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

Pull-out Drawer
Stainless steel, liquid-tight drawer with slides. i.Series and Horizon Series available. Specify when ordering.

Roll-out Baskets
Epoxy-coated, wire baskets with fully extendable slides are offered as an alternative to standard wire shelving.

Wire Shelves
Epoxy-coated wire shelves are adjustable, and designed to fit individual cabinets.

Locking Drawers
Optional stainless steel locking drawer includes cover and key lock for secure closure.

Heated Glass Doors
Removes fogging and condensation in humid environments.

Integrated Electromagnetic Access Control

i.Series®
Integrated electromagnetic access control offers secure access to the refrigerator via the i.C³ Information Center. An electromagnetic lock is integrated into the unit and controlled by PIN entry.

i.C³ access control homescreen

  » Up to 100 User IDs can be set up directly from the i.C³ and programmed with an individual access PIN
  » The Access Control display can be set as an alternative Home Screen.
  » Access Control log provides audit trail of door entries and can be downloaded
  » Key override is included

Horizon Series™
The Horizon access control keypad provides fail-secure digital keypad access. A lock is integrated into the unit and unlocked by entering a user code on the keypad.
  » Up to 100 User Codes can by entered into the keypad
  » Key override included

Horizon access keypad

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

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.

Drawer Dividers
Polycarbonate upright or angled dividers for use in pull-out drawers. Excellent for blood bags and automated medication dispensing systems.

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

Leveling feet
Field-installable kit used to provide a level, stable base for refrigerator. Can be installed without tipping unit.

Left-hinged single door

Stainless steel interior

Chart Recorder Deduction

Floor and Wall Bracket Kit

IQ/OQ Equipment Validation Guide

Temperature Validation

Certificate of Calibration

i.C³ Screen Protectors

USB Flashdrive

Specifications

Blood Bank Refrigerators
Temperature Range +2° to +10°C, factory set to +4°C

Model/Series	Doors	Bag Capacity*	Volume Cu Ft / L	Int. Dimensions WxHxD (in/mm)	Ext. Dimensions** WxHxD (in/mm)	Drawers	Electrical Voltage (Hz)	Amps (FLA)	Net Weight lb / kg	Warranty
iB111 i.Series	1	165	11 326	20 x 49.5 x 20 508 x 1258 x 508	24.25 x 70.5 x 24.5 616 x 1791 x 623	5	115 (60) 230 (50/60)	7 3.5	352 160	Rel.i Plus
HB111 Horizon Series	1	165	11 326	20 x 49.5 x 20 508 x 1258 x 508	24.25 x 70.5 x 24.5 616 x 1791 x 623	5	115 (60) 230 (50/60)	7 3.5	345 157	Rel.i
iB120 i.Series	1	364	20.2 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 79.5 x 29.5 750 x 2020 x 750	7	115 (60) 230 (50/60)	7.5 4.2	531 241	Rel.i Plus
HB120 Horizon Series	1	364	20.2 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 78.75 x 29.5 750 x 2001 x 750	7	115 (60) 230 (50/60)	7.5 4.2	528 240	Rel.i
iB125 i.Series	1	504	25.2 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 79.5 x 35.5 750 x 2020 x 902	7	115 (60) 230 (50/60)	7.5 4.2	559 254	Rel.i Plus
HB125 Horizon Series	1	504	25.2 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 78.75 x 35.5 750 x 2001 x 902	7	115 (60) 230 (50/60)	7.5 4.2	556 253	Rel.i
iB245 i.Series	2	728	44.9 1271	55 x 58.25 x 24.25 1397 x 1480 x 616	59.25 x 79.5 x 29.5 1505 x 2020 x 750	14	115 (60) 230 (50/60)	11.5 6	836 380	Rel.i Plus
HB245 Horizon Series	2	728	44.9 1271	55 x 58.25 x 24.25 1397 x 1480 x 616	59.25 x 78.75 x 29.5 1505 x 2001 x 750	14	115 (60) 230 (50/60)	11.5 6	835 379	Rel.i
iB256 i.Series	2	1008	56 1586	55 x 58.25 x 30.25 1397 x 1480 x 769	59.25 x 79.5 x 35.5 1505 x 2020 x 902	14	115 (60) 230 (50/60)	11.5 6	890 404	Rel.i Plus
HB256 Horizon Series	2	1008	56 1586	55 x 58.25 x 30.25 1397 x 1480 x 769	59.25 x 78.75 x 35.5 1505 x 2001 x 902	14	115 (60) 230 (50/60)	11.5 6	880 400	Rel.i

Specifications subject to change
Meets AABB, ARC, and FDA standards for blood storage · Certified to applicable UL and CSA standards by a NRTL
Published interior volumes are nominal; usable cu ft (liters) capacity may be offset by protrusions into cabinet.
Technical Data Sheets for all Blood Bank Refrigerators are available at www.helmerinc.com
*Capacity based on blood bag volume of 450ml · **Does not include door handle, electrical panel, and evaporation tray.

Warranty

Reli.Plus™   7 years compressor | 2 years parts | 1 year labor at Helmer
Rel.i™   5 years compressor | 2 years parts | 1 year labor at Helmer

Warranties applicable in the U.S. and Canada.
For international warranty information, contact your local distributor.