

# -30°C Freezers

Laboratory | Plasma



**TrueBlue.**  
Reliability & Support

i.Series® | Horizon Series™



# Medical-grade freezers designed specifically for healthcare and life science applications.

Helmer Scientific high-performance upright freezers 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 free to focus on your critical work while your products receive our TrueBlue protection.

## Helmer Freezers Deliver

### High-Quality Craftsmanship

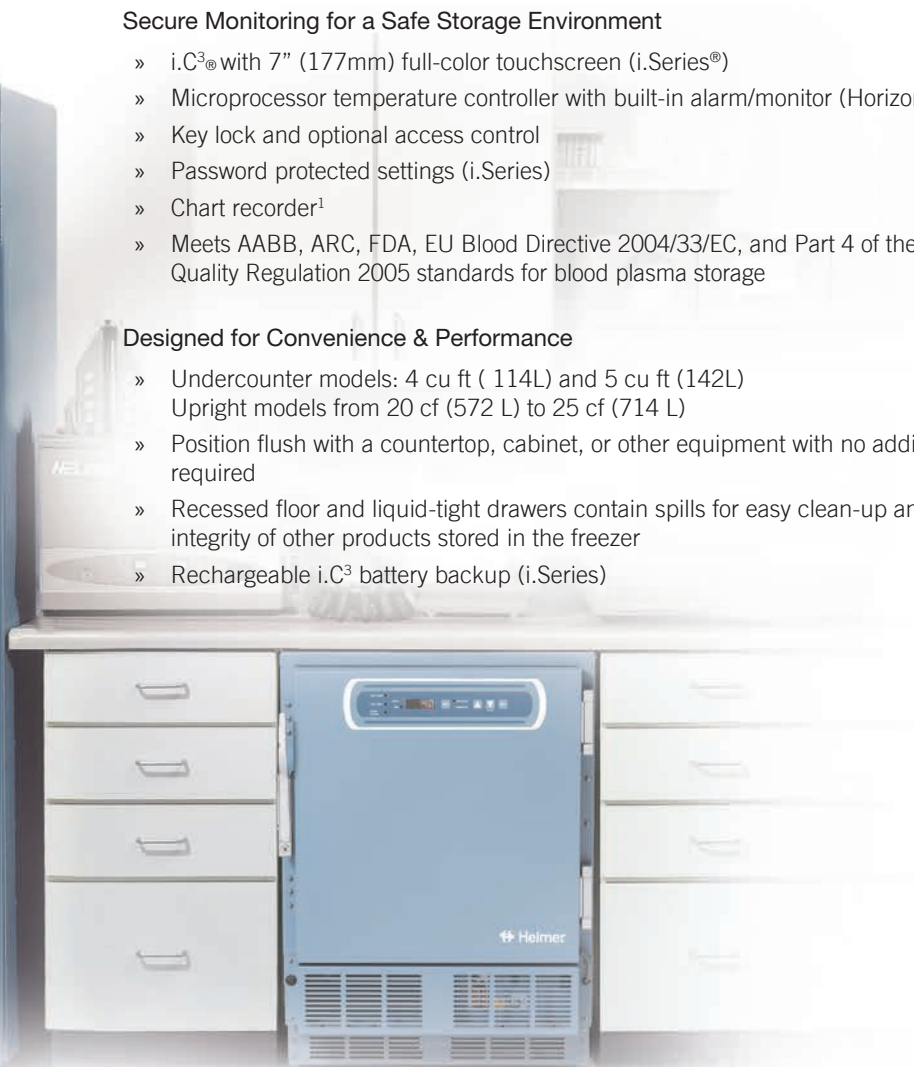
- » Superior chamber temperature uniformity and quick recovery with heavy-duty, air-cooled refrigeration system
- » Bacteria-resistant powder coated exterior and interior provide added security
- » Sure-Seal self-closing door with magnetic closure eliminates broken door latches
- » Programmable electrical defrost: Program up to 4 daily defrost events to run during low use periods for greater efficiency.
- » Hospital grade plug enhances electrical safety/serviceability

### Secure Monitoring for a Safe Storage Environment

- » i.C<sup>3</sup>® 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<sup>1</sup>
- » Meets AABB, ARC, FDA, EU Blood Directive 2004/33/EC, and Part 4 of the Blood Safety and Quality Regulation 2005 standards for blood plasma storage

### Designed for Convenience & Performance

- » Undercounter models: 4 cu ft (114L) and 5 cu ft (142L)  
Upright models from 20 cf (572 L) to 25 cf (714 L)
- » 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 freezer
- » Rechargeable i.C<sup>3</sup> battery backup (i.Series)



# More choices

## Product Line Overview

Helmer offers two distinct lines for upright freezers. 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™



Shown: iPF120, HPF120, iPF120, HPF120, iPF104, HPF105

## Undercounter -30C Freezer Selection Guide

-15°C to -30°C Factory set to -30°C

Select the Optimal Capacity and Design		i.Series®				Horizon Series™			
		iPF104-ADA	iPF105	iLF104-ADA	iLF105	HPF104-ADA	HPF105	HLF104-ADA	HLF105
Application		Plasma	Plasma	Laboratory	Laboratory	Plasma	Plasma	Laboratory	Laboratory
Capacity	cu ft / liters	4 113	5 142	4 113	5 142	4 113	5 142	4 113	5 142
Plasma Box Capacity	boxes	44	44	N/A	N/A	44	44	N/A	N/A
Storage	standard	2 drawers	2 drawers	2 shelves	2 shelves	2 drawers	2 drawers	2 shelves	2 shelves

## -30C Freezer Selection Guide

-15°C to -30°C Factory set to -30°C

Select the Optimal Capacity and Design		i.Series®				Horizon Series™			
		iPF120	iPF125	iLF120	iLF125	HPF120	HPF125	HLF120	HLF125
Application		Plasma	Plasma	Laboratory	Laboratory	Plasma	Plasma	Laboratory	Laboratory
Capacity	cu ft / liters	20.2 572	25.2 714	20.2 572	25.2 714	20.2 572	25.2 714	20.2 572	25.2 714
Plasma Box Capacity	boxes	360	464	360	464	360	464	360	464
Storage	standard	8 drawers	8 drawers	4 shelves	4 shelves	8 drawers	8 drawers	4 shelves	4 shelves

# Outstanding features at-a-glance

## Refrigeration System

- » Heavy-duty, air-cooled refrigeration system with non-CFC R404A refrigerant provides high efficiency and is environmentally friendly
- » Forced-air circulation maintains chamber uniformity and provides quick recovery after door openings
- » Auto condensate evaporation
- » Evaporator fan(s) shut off during door openings to maintain stable temperatures
- » Programmable electrical defrost. Up to 4 events can be programmed to actual time desired, allowing cycles to run during low use periods.

## Cabinet Construction

- » Bacteria-resistant powder coated interior and exterior
- » Superior engineered frame for maximum rigidity
- » Sure-Seal self-closing door with magnetic closure
- » Key lock
- » Minimum of 2" (51mm) non-CFC foamed urethane insulation
- » Recessed floor contains spills for easy clean-up
- » Hospital grade plug and cord

### Upright Models

- » Cold-Shield™ System: Air shield with hinged door and closely spaced drawers (plasma)
- » Heated door frame (or both?)
- » Swivel locking casters
- » Access port located in top of cabinet for external monitoring probe(s)

### Undercounter Models

- » Front ventilation
- » Front and side access panels
- » Leveling feet
- » Rear access port
- » All units stackable

## Chart Recorder

Plasma Freezers 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



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



### Laboratory Models

- » Adjustable shelves
- » Side and rear guards prevent items from falling off
- » Stainless steel standards guard against rust and corrosion

### Plasma Models

- » Solid, stainless steel pull-out drawers
- » Durable, liquid-tight construction for containment of spills
- » Easy-Glide stainless steel drawer slides and standards for smooth operation at low temperatures

## Temperature Control and Monitoring

i.Series®	Horizon Series™
 <p><b>Alarm/Monitor</b></p>	 <p><b>Alarm/Monitor</b></p>
Exclusive i.C³ Information Center	Microprocessor temperature controller with alarm/monitor
<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/update</li> <li>· Optional RS232 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 of upper and lower chambers / °C or °F</li> <li>· Event log displays date, time, and temperature data</li> <li>· Compressor log displays compressor temperature performance</li> <li>· Defrost log</li> <li>· Defrost cycle alert</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</li> <li>· Manual alarm test</li> <li>· Dry contact alarm connection</li> <li>· 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 laboratory and plasma freezers. Storage can be customized with various combinations of shelves, roll-out baskets, or pull-out drawers. See page 7 for a complete list of options and accessories.



# Exclusively on i.Series®

## i.C<sup>3</sup>® Information Center

The i.C<sup>3</sup> Information Center provides constant temperature monitoring and multiple information logs while offering security features to keep settings safe. It consolidates the 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.C<sup>3</sup> 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 freezer can be secured by an electromagnetic lock controlled by PIN entry.

- » 100 User IDs can be set up directly from the i.C<sup>3</sup> 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.C<sup>3</sup> Information Center and can be opened in a spreadsheet program. Firmware updates can also be uploaded.



# Specifications

## -30°C Freezer Dimensions

Temperature Range -15° to -30°C, factory set to -30°C (auto defrost)

Model/Series	Doors	Box Capacity	Volume Cu Ft / L	Int. Dimensions WxHxD (in/mm)	Ext. Dimensions* WxHxD (in/mm)	Shelves	Drawers	Electrical Voltage (Hz)	Amps (FLA)	Net Weight lb / kg	Warranty
<b>Laboratory Freezers</b>											
<b>iLF104-ADA</b> i.Series	1	n/a	4 113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 32 x 26.75 610 x 813 x 680	4	0	115V (60)	5.75	211 96	Rel.i
<b>HLF104-ADA</b> Horizon Series	1	n/a	4 113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 32 x 26.75 610 x 813 x 680	2	0	115V (60)	5.75	205 93	Standard
<b>iLF105</b> i.Series	1	n/a	5 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 34 x 26.75 610 x 864 x 680	2	0	115V (60) 230V (50) 230V (60)	5.75 2.8 3.1	215 98	Rel.i
<b>HLF105</b> Horizon Series	1	n/a	5 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 34 x 26.75 610 x 864 x 680	2	0	115V (60) 230V (50) 230V (60)	5.75 2.8 3.1	209 95	Standard
<b>iLF120</b> i.Series	1	n/a	20.2 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 80 x 29.5 750 x 2032 x 750	4	0	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	443 201	Rel.i
<b>HLF120</b> Horizon Series	1	n/a	20.2 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 80 x 29.5 750 x 2032 x 750	4	0	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	440 200	Standard
<b>iLF125</b> i.Series	1	n/a	25.2 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 80 x 35.5 750 x 2032 x 902	4	0	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	481 219	Rel.i
<b>HLF125</b> Horizon Series	1	n/a	25.2 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 80 x 35.5 750 x 2032 x 902	4	0	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	478 217	Standard
<b>Plasma Freezers</b>											
<b>iPF104-ADA</b> i.Series	1	44	4 113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 32 x 26.75 610 x 813 x 680	0	2	115V (60)	5.75	217 99	Rel.i
<b>HPF104-ADA</b> Horizon Series	1	44	4 113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 32 x 26.75 610 x 813 x 680	0	2	115V (60)	5.75	211 96	Standard
<b>iPF105</b> i.Series	1	44	5 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 34 x 26.75 610 x 864 x 680	0	2	115V (60) 230V (50) 230V (60)	5.75 2.8 3.1	221 101	Rel.i
<b>HPF105</b> Horizon Series	1	44	5 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 34 x 26.75 610 x 864 x 680	0	2	115V (60) 230V (50) 230V (60)	5.75 2.8 3.1	215 98	Standard
<b>iPF120</b> i.Series	1	360	20.2 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 80 x 29.5 750 x 2032 x 750	0	8	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	505 230	Rel.i
<b>HPF120</b> Horizon Series	1	360	20.2 572	24.75 x 58.25 x 24.25 629 x 1480 x 616	29.5 x 80 x 29.5 750 x 2032 x 750	0	8	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	502 228	Standard
<b>iPF125</b> i.Series	1	464	25.2 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 80 x 35.5 750 x 2032 x 902	0	8	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	557 253	Rel.i
<b>HPF125</b> Horizon Series	1	464	25.2 714	24.75 x 58.25 x 30.25 629 x 1480 x 769	29.5 x 80 x 35.5 750 x 2032 x 902	0	8	115 (60) 208/230 (60) 230 (50)	8.5 4.3 3.8	554 252	Standard

Specifications subject to change · External transformers are not utilized. · Meets IEC 61010 Standard  
Meets AABB, ARC, and FDA standards for blood plasma 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 Laboratory and Plasma Freezers are available at [www.helmerinc.com](http://www.helmerinc.com)  
\*Does not include door handle, electrical panel, and evaporation tray. Not all products are available in all countries. Please contact your local representative

## Warranty

**Rel.i™** 5 years compressor | 2 years parts | 1 year labor at Helmer  
**Standard** 3 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.



# High-Performance

## Options & Accessories

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

### **Pull-out Drawers**

Stainless steel drawers are liquid-tight.

### **Shelves**

Additional shelves are adjustable and designed to fit individual cabinets.

### **Roll-out Baskets**

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

### **Integrated Electromagnetic Access Control - i.Series®**

Integrated electromagnetic access control offers secure access to the freezer via the i.C<sup>3</sup> Information Center. An electromagnetic lock is integrated into the unit and controlled by PIN entry.

- » Up to 100 User IDs can be set up directly from the i.C<sup>3</sup> 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

### **Integrated Electromagnetic Access Control - 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 be entered into the keypad
- » Key override included



i.C3 access  
control homescreen



Horizon  
access keypad

### **Temperature Chart Recorders**

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

- » Reorder Chart Recorder Paper  
4" (102mm) diameter -50°C to 0°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 freezers. Compatible with most systems.

### **Drawer Dividers**

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

### **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. (Standard on U/C models)

### **Casters**

### **Left-hinged single door**

### **Stainless steel interior**

### **Stainless steel exterior (U/C models)**

### **Floor and Wall Bracket Kit**

### **Stacking Kit (U/C models)**

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

### **Temperature Validation**

### **Certificate of Calibration**

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

### **USB Flashdrive**



Helmer Scientific

14400 Bergen Boulevard · Noblesville, IN 46060 USA

Toll Free (U.S. and Canada): 800.743.5637

Phone: +1.317.773.9073 · Fax: 317.773.9082

Email: sales@helmerinc.com · www.helmerinc.com