Freezers

Laboratory & Plasma





Laboratory & Plasma Freezers

Precisely executed. Sharply designed.

Helmer has provided high-quality laboratory equipment and refrigerated products for over 30 years. Our experience and attention to detail allow us to provide a product that offers superior uniformity, outstanding reliability, and exceptional benefits that bring value every day. In addition, our commitment to service and support ensures satisfaction throughout the life of your product. Whether storing blood products, reagents, vaccines, or medication, a Helmer product offers **True Blue** protection.

We're not like everyone else, we're **Distinctly Helmer**.

Helmer Freezers Deliver

High-Quality Craftsmanship

- · Superior chamber temperature uniformity and quick recovery with heavy-duty, air-cooled refrigeration system
- · Operating temperature range from -15°C to -30°C
- Bacteria-resistant powder coated interior and exterior for added security
- Sure-Seal self-closing door with magnetic closure eliminates broken door latches
- 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.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 (Plasma)
- 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 and Performance

- · Single door models from 5 cu ft (142 L) to 25.2 cu ft (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 battery backup (i.C3)



i.Series® and Horizon Series™

Helmer has two distinct -30°C freezer lines. The i.Series offers many unique features not found on other freezer models. The i.C³ User Interface anchors this top-of-the-line series. It offers constant temperature monitoring and control, multiple information logs, event acknowledgement and downloading via 7" (177mm) full-color touchscreen. (See page 5 for more information.)

The Horizon Series offers a temperature controller with a built-in alarm. It features an LED digital temperature display, programmable high temperature alarms, manual alarm checks, and a programmable operating range.

Both the i.Series and Horizon Series offer high quality construction and attention to detail throughout.





Laboratory & Plasma Models

- · i.Series and Horizon Series lines
- · Upright and Undercounter models
- · Capacity from 5 cu ft to 25 cu ft (142 L to 714 L)

Upright Models

- · Single door with 8 drawers or 4 shelves
- · Plasma box capacity from 360 to 464 boxes
- · Door-mounted, eye-level controls (i.Series)

Undercounter Models

- · Single door with 2 drawers or 2 shelves
- · Plasma box capacity 44 boxes
- · Door-mounted controls
- · Front ventilation



Upright Freezers

Temperature Control and Monitoring

i.Series®

- i.C³, with 7" (177mm) full-color touchscreen monitor (described on page 5)
- · Two stainless steel monitoring probes in product simulation bottles
- · Temperature display in °C or °F

Horizon Series™

- Digital microprocessor temperature controller with a built-in alarm/ monitor factory set to -30°C
- · Single, stainless steel monitoring probe in product simulation bottle
- · Digital offset adjustment for calibration

i.Series® and Horizon Series™

- Defrost can be programmed to actual time desired, allowing cycles to run automatically during low use periods
- · Chart recorder with 4" (102mm), 7-day circular charts (Plasma)
 - Inkless, pressure-sensitive chart paper with a range of -50°C to 0°C
 - Battery backup
 - Touch button controls for chart changes and calibration



Storage

Laboratory Models

- · Adjustable, epoxy coated wire shelves
- · Stainless steel standards guard against rust and corrosion
- · Side and rear guards prevent items from falling off the shelf

Plasma Models

- 8 solid stainless steel pull out drawers with Cold-Shield™ System
- · Durable, liquid-tight construction for containment of spills
- Easy-Glide stainless steel drawer slides and standards for smooth operation at low temperatures



Refrigeration System

- Heavy-duty, air-cooled, forced-air refrigeration system with non-CFC R-404A refrigerant provides high efficiency and is environmentally friendly
- Auto condensate evaporation. Evaporator fan(s) shut off during door openings to maintain stable temperatures
- · Programmable electric defrost

Cabinet Construction

- · Bacteria-resistant powder coated interior and exterior
- Cold-Shield™ System: Air shield with hinged door and closely spaced drawers (Plasma)
- · Superior engineered frame for maximum rigidity
- Heated door frame
- · Innovative self-closing Sure-Seal door system with magnetic latch
- · Key lock
- · 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)
- Rechargeable battery is environmentally friendly and long-lasting (i.C³)
- · Recessed floor for easy clean-up
- · Hospital-grade plug and cord











i.C3_{TM}

Monitor · Acknowledge · Download

Exclusively on i.Series® Models

i.Series refrigerators are monitored with Helmer's exclusive i.C3 User Interface. The i.C3 provides constant temperature monitoring and control, and multiple information logs with historical data that can be downloaded and saved.

i.Act™ event acknowledgement allows users to immediately record corrective actions on-screen at the time of the event. Once downloaded, this information will be available to maintain quality control data for auditing purposes.

This icon-driven monitoring system features a door mounted 7" (177mm) full-color touchscreen ergonomically placed at eye-level on upright models and angled on undercounter models. The i.C3 includes sound and visual indicators, and touch navigation. An interactive temperature graph, home screen customization, password protection, and modular design for future options are also included.

The i.D™ Integrated Electronic Access Control factory-installed option is currently available. It offers secure access to the unit via PIN entry on the i.C3 for up to 100 users. For more information see page 8.



Enter Event Cause, Action Taken, and Signature directly on-screen and download for audits





Home



Temperature Graph



Download

i.Series® / Horizon Series™ Monitoring

i.Series®



Horizon Series™



Exclusive i.C3_™ User Interface

- · 7" (177mm) full-color, door-mounted touchscreen
- · Automatic high/low alarm testing (Peltier-based)
- · USB ports (2) for download/upload/upgrade
- · RJ-45 hub
- · Optional RS-232 data port
- · Dry contact alarm connection
- · Password protected settings
- · Dual alarm probes
- · Digital display of upper and lower chamber temperatures
- · Event log displays date, time, and temperature data
- · Compressor log displays compressor temperature performance
- · Defrost log
- · Defrost icon (snowflake) alerts user that defrost cycle is in progress
- · Interactive temperature graph
- · Digital calibration
- · Rechargeable battery backup
- · Date and time display
- · Alarm mute with adjustable ring-back interval
- · Adjustable alarm volume
- · Four alarm tones
- · High and low temperature alarms
- · Door aiar alarm
- · Power failure alarm
- · Condenser temperature alarm

- Microprocessor-based controller with alarm/monitor · LED digital display, top bezel mounted
- · Manual alarm test
- · Dry contact alarm connection
- · Single alarm probe
- · LED display of chamber temperature
- · Digital calibration
- · Battery backup
- · Alarm mute with 5-minute ring-back interval
- · Alarm silence with key switch
- · High and low temperature alarms
- · Door aiar alarm
- · Power failure alarm

Specifications

Model/Series	Operating Range	Volume (cu ft/L) plasma boxes	Interior Dimensions (w x h x d) (in/mm)	Exterior Dimensions (w x h x d) (in/mm)	Shelves	Drawers	Compressor	Electrical	Net Weight
Undercounter									
iLF105 i.Series	-15° to -30°C	5 / 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	2	0	.33 HP Air-Cooled R-404A Non-CFC	115V 60Hz 5.75 FLA 230V 50Hz 2.8 FLA 230V 60Hz 3.1 FLA	215 lb / 98 kg
HLF105 Horizon Series	-15° to -30°C	5 / 142	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	2	0	.33 HP Air-Cooled R-404A Non-CFC	115V 60Hz 5.75 FLA 230V 50Hz 2.8 FLA 230V 60Hz 3.1 FLA	209 lb / 95 kg
iPF105 i.Series	-15° to -30°C	5 / 142 44 boxes	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	0	2	.33 HP Air-Cooled R-404A Non-CFC	115V 60Hz 5.75 FLA 230V 50Hz 2.8 FLA 230V 60Hz 3.1 FLA	221 lb / 100 kg
HPF105 Horizon Series	-15° to -30°C	5 / 142 44 boxes	19.5 x 19.75 x 22 496 x 502 x 559	24 x 33.5 x 26.75 610 x 851 x 680	0	2	.33 HP Air-Cooled R-404A Non-CFC	115V 60Hz 5.75 FLA 230V 50Hz 2.8 FLA 230V 60Hz 3.1 FLA	215 lb / 98 kg
Single Door									
i LF120 i.Series	-15° to -30°C	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	443 lb / 201 kg
HLF120 Horizon Series	-15° to -30°C	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	440 lb / 200 kg
iLF125 i.Series	-15° to -30°C	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	481 lb / 219 kg
HLF125 Horizon Series	-15° to -30°C	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	478 lb / 217 kg
iPF120 i.Series	-15° to -30°C	20.2 / 572 360 boxes	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	505 lb / 230 kg
HPF120 Horizon Series	-15° to -30°C	20.2 / 572 360 boxes	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	502 lb / 228 kg
iPF125 i.Series	-15° to -30°C	25.2 / 714 464 boxes	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	557 lb / 253 kg
HPF125 Horizon Series	-15° to -30°C	25.2 / 714 464 boxes	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	1.25 HP Air-Cooled R-404A Non-CFC	208 / 230V 60Hz 4.3 FLA 230V 50Hz 3.8 FLA	554 lb / 252 kg

115V 60Hz NEMA 5-15 Plug 208 / 230V 60Hz NEMA 6-15 Plug 230V 50Hz CEE 7/7 Plug External transformers are not utilized.

Meets IEC 61010 Standard. Meets AABB, ARC and FDA standards for blood plasma storage. Specifications subject to change. Certified to applicable UL and CSA standards by a NRTL. Product Specification Sheets for all Laboratory and Plasma Freezers are available at www.helmerinc.com Published interior volumes are nominal; usable cu ft (liters) capacity may be offset by protrusions into cabinet.





Warranty

i.Series® / Rel.i™

5 years compressor / 2 years parts / 1 year labor at Helmer

Horizon Series™

3 years compressor / 2 years parts / 1 year labor at Helmer

Warranty applicable in US and Canada Contact your local distributor for International warranties

Custom Storage Options

Roll Out Baskets

Epoxy coated wire baskets are 4" (102mm) high and adjustable in 1" (26mm) increments. Maximum load 100 lb (46 kg) per basket.





Solid Stainless Steel Drawer with Hardware

Pull out drawers are 4" (102mm) high and adjustable in 1" (26mm) increments. Maximum load 100 lb (46 kg) per drawer.

Full-Size Shelf with Hardware

Epoxy coated wire shelves are adjustable in 1" (26mm) increments. Maximum load 100 lb (46 kg) per shelf.



Options & Accessories

Leveling Feet

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



Left-Hinged Single Door

Factory installed

Stainless Steel Interior

Specify when ordering

Temperature Chart Recorder

4" (102mm), 7-day inkless chart recorder. Includes battery backup and a supply of 52 charts. Factory installed



Chart Recorder Paper

4" (102mm) diameter, -50°C to 0°C, package of 52

Chart Recorder Deduction

Plasma Freezers may be ordered without chart recorder. Specify when ordering.

Temperature Validation

Package certifies the temperature performance of the freezer. This option must be ordered at the time the unit is purchased. Contact Helmer for additional details.

Certificate of Calibration

Certifiies that monitor was calibrated with NIST traceable thermometer before it left Helmer facility.

i.C3 Screen Protectors

Package of 3 clear screen protectors for use on i.C³ User Interface



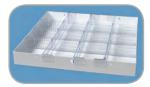
USB Flashdrive

Used to download and upload information from/to the i.C³



Storage Trays

Simplify and organize your storage needs. Each tray comes with dividers and rails so that individual storage areas can be customized. Great for storage of medication and vaccines.



Floor and Wall Bracket Kit

Secures refrigerator to the building floor and/or wall. The unit has factory-threaded mounting holes. Heavy-gauge, powder coated steel floor mounting brackets and cabinet anchor hardware are provided. Customer to provide floor and/or wall anchor hardware and onsite assembly.

Remote Alarms (RA1 and RA4)

Extends existing alarms to remote locations within the facility. The RA1 offers monitoring of one device or zone and the RA4 provides monitoring of up to four devices or zones. Operational up to 3000 ft / 915m away (wiring not included).



Access Control

i.Series®

i.D™ Integrated Electronic Access Control via i.C3





Optional Access Control offers secure access to a refrigerator or freezer. An electronic lock

is integrated into the unit and controlled by PIN entry.

- Up to 100 user ID's 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.
- · Key override

The Access Control log provides an audit trail of all refrigerator or freezer entries and includes the User ID, Date, Time, Duration and Method of Entry. This log can be downloaded and saved.

Horizon Series™

Integrated Access Control via Keypad



The optional 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 integrated keypad.



- · Up to 100 user codes can be entered into the keypad.
- Key override

Undercounter Freezers





i.Series and Horizon Series Laboratory and Plasma Undercounter Freezers feature high-quality craftsmanship, secure monitoring, and easy access for cleaning and maintenance. Please refer to our Undercounter

Freezer literature or www.helmerinc.com for more information.

