## Refrigerators Freezers

Undercounter



i.Series<sup>®</sup> Horizon Series<sup>™</sup>



## Undercounter Refrigerators & Freezers Blood Bank & Laboratory/Pharmacy

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 medications, a Helmer product offers **TrueBlue**<sup>™</sup> protection.

#### Helmer Refrigerators & Freezers Deliver

#### **High-Quality Craftsmanship**

- Superior chamber temperature uniformity and quick recovery with heavy-duty, air-cooled refrigeration system
- Temperature uniformity of +/- 1°C (Blood Bank)
- · Programmable defrost (freezers)
- · Bacteria-resistant powder coated exterior and interior for added security
- · Sure-Seal self-closing door with magnetic latch
- · Undercounter, free-standing, or stacked
- · Sustainable, U.S. EPA and SNAP approved Ecomate<sup>™</sup> insulation
- · Hospital grade plug enhances electrical safety/serviceability

#### Secure Monitoring for a Safe Storage Environment

- · i.C<sup>3</sup><sup>®</sup> with 7" (177mm) full-color touchscreen (i.Series)
- Microprocessor temperature controller with built-in alarm/monitor (Horizon Series)
- · Key lock or optional access control
- · 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

#### **Designed for Convenience & Performance**

- · Field-reversible door (swing contained within width dimension)
- Front ventilation eliminates the need for top or side clearance
- · Drop-down access panel conceals power switch, battery, and alarms\*
- · Front serviceability
- Rechargeable i.C<sup>3</sup> battery backup
- ADA compatible
   models available



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#### Reduced Humidity Levels Create Dry Storage Environment

Helmer has developed a proprietary approach to refrigeration for i.Series and Horizon Series Laboratory and Pharmacy Refrigerators resulting in reduced condensation on boxes and other containers.

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#### i.Series<sup>®</sup>, Horizon Series<sup>™</sup>, and Scientific Series<sup>™</sup>

Helmer offers three distinct lines for undercounter refrigerators and two lines for undercounter freezers. All lines offer high quality construction and attention to detail throughout.

The i.Series offers many unique features not found on other refrigerator models. The i.C $_{\odot}^{3}$  anchors this top-of-the-line series. It offers constant temperature monitoring and control, multiple information logs, event acknowledgement, and downloading via a 7" (177mm) full-color touchscreen. (See page 6 for more information.)

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

The Scientific Series is a basic undercounter refrigerator that provides superior temperature uniformity for users with external monitoring systems or medication dispensing locks that include temperature monitoring.





#### Refrigerators

#### Laboratory & Blood Bank Models

- i.Series, Horizon Series, and Scientific Series lines
- · 5 cf (142 I) capacity
- Operating temperature range from +2°C to +10°C, factory set to 4°C
- · 2 drawers (Blood Bank)
- · 2 shelves (Laboratory)
- · Blood bag capacity 66 bags
- · Door-mounted controls\*
- · Front ventilation



#### **Freezers**

#### Laboratory & Plasma Models

- · i.Series and Horizon Series lines
- · 5 cf (142 I) capacity
- Operating temperature range from -15°C to -30°C, factory set to -30°C
- · 2 drawers (Plasma)
- · 2 shelves (Laboratory)
- · Plasma box capacity 44 boxes
- · Door-mounted controls
- · Front ventilation



#### **ADA Models**

ADA undercounter refrigerators and freezers are available to fit under 34" (864mm) ADA compliant counters.

- · 4 cf (113 I) capacity
- 2 drawers (2.5" / 64mm) (Blood Bank refrigerators and Plasma freezers)
- · 2 shelves (Laboratory refrigerators and freezers)
- · Blood bag capacity 66 bags
- · Plasma box capacity 44 boxes
- Door-mounted controls\*
- · Front ventilation



## **Undercounter Refrigerators**

#### **Temperature Control and Monitoring**

#### i.Series®

- i.C<sup>3</sup><sub>®</sub>, with 7" (177mm) full-color touchscreen monitor described on page 6
- · Temperature display in °C or °F

#### Horizon Series<sup>™</sup>

- Digital microprocessor temperature controller with a built-in alarm/monitor
- · Digital offset adjustment for calibration

#### i.Series and Horizon Series

- · Stainless steel monitoring probe in product simulation bottle
- Chart recorder with 4" (102mm), 7-day circular charts (Blood Bank)
  - Inkless, pressure-sensitive chart paper (-5°C to +20°C)
  - Battery backup
  - Touch button controls for chart changes and calibration

#### Scientific Series<sup>™</sup>

- · Digital microprocessor temperature controller
- · Temperature display in °C or °F

#### **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 (Blood Bank)
- Auto condensate evaporation. Evaporator fan(s) shut off during door openings to maintain stable temperatures
- · Low humidity levels with reduced condensation (Laboratory)\*

#### **Cabinet Construction**

- · Bacteria-resistant powder coated interior and exterior
- · Sure-Seal self-closing, field reversible door with magnetic closure
- · Key lock
- Front ventilation
- · Front and side access panels (i.Series and Horizon Series)
- Minimum of 2" (51mm) Ecomate<sup>™</sup> environmentally friendly and GRAS approved foam insulation
- Leveling feet
- Rechargeable, longlasting, environmentally friendly i.C<sup>3</sup> battery
- · Recessed floor for easy clean-up
- Hospital grade plug and cord
- Rear access port
- · All units stackable







i.Series<sup>®</sup> with optional glass door

Horizon Series<sup>™</sup> ADA Scientific Series

#### Storage

#### Laboratory Models

- Adjustable, epoxy coated wire shelves (i.Series / Horizon Series)
- Adjustable, perforated metal shelves (Scientific Series)
- Side and rear guards prevent items from falling off
- Stainless steel standards guard against rust and corrosion

#### Blood Bank Models

- · Solid stainless steel pull out drawers
- 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 in the drawer



i.Series®



Horizon Series



## **Undercounter Freezers**

#### **Temperature Control and Monitoring**

#### i.Series®

- $\cdot \,$  i.C3  $_{\ensuremath{\textcircled{B}}}$  , with 7" (177mm) full-color touchscreen monitor described on page 6
- · Temperature display in °C or °F

#### Horizon Series<sup>™</sup>

- Digital microprocessor temperature controller with a built-in alarm/ monitor
- · Digital offset adjustment for calibration

#### i.Series and Horizon Series

- · Stainless steel monitoring probe in product simulation bottle
- 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 (-50°C to 0°C)
  - Battery backup
  - Touch button controls for chart changes and calibration

#### **Refrigeration System**

- Heavy-duty, air-cooled refrigeration system with non-CFC R404A 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
- · Sure-Seal self-closing, field reversible door with magnetic latch
- · Key lock
- · Front ventilation
- · Front and side access panels
- Minimum of 2" (51mm) Ecomate<sup>™</sup> environmentally friendly and GRAS approved foam insulation
- · Leveling feet
- · Rechargeable, longlasting, environmentally friendly i.C<sup>3</sup> battery
- · Recessed floor for easy clean-up
- Hospital grade plug and cord
- · Rear access port
- · All units stackable





#### 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

#### 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
- Easy access to inventory with fully extendable drawer slides
- · Scratch-Guard edge protectors
- Tube-Guard drawer shields minimize the risk of tube damage in the drawer









#### i.C<sup>3</sup>® Monitor · Acknowledge · Download

#### Exclusively on i.Series® Models

i.Series refrigerators are monitored with Helmer's exclusive i.C<sup>3</sup> user interface. The i.C<sup>3</sup> provides constant temperature monitoring and control, and multiple information logs with historical data that can be downloaded and saved.

i.Act<sup>™</sup> 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.C<sup>3</sup> 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<sup>m</sup> Integrated Electronic Access Control factory-installed option offers secure access to the unit via PIN entry on the i.C<sup>3</sup> 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



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Temperature Graph



#### **Temperature Control and Monitoring**

i.Series <sup>®</sup> Refrigerators & Freezers	Horizon Series <sup>™</sup> Refrigerators & Freezers	Scientific Series <sup>™</sup> Refrigerators		
Alarm/Monitor	Alarm/Monitor	Controller		
Exclusive i.C <sup>3</sup> <sup>®</sup> User Interface	Microprocessor-based temperature controller with alarm/monitor			
<ul> <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 RS232 data port</li> </ul>	<ul> <li>LED digital display</li> <li>Manual alarm test</li> </ul>	· LED digital display		
Dry contact alarm connection     Password protected settings	· Dry contact alarm connection			
<ul> <li>Alarm probe</li> <li>Event log displays date, time, and temperature data</li> <li>Compressor log displays compressor temperature performance</li> <li>Defrost log (freezers)</li> <li>Defrost icon (snowflake) alerts user that defrost cycle is in progress (freezers)</li> <li>Interactive temperature graph</li> </ul>	· Alarm probe			
<ul> <li>Digital calibration</li> <li>Rechargeable battery backup</li> <li>Date and time display</li> </ul>	<ul> <li>Digital calibration</li> <li>Battery backup</li> </ul>			
<ul> <li>Alarm mute with adjustable ring-back interval</li> <li>Adjustable alarm volume</li> <li>Four alarm tones</li> </ul>	<ul> <li>Alarm mute with 5 minute ring-back interval</li> <li>Alarm silence with key switch</li> </ul>			
<ul> <li>High and low temperature alarms</li> <li>Door ajar alarm</li> <li>Power failure alarm</li> <li>Condenser temperature alarm</li> <li>RJ45 hub*</li> </ul>	<ul> <li>High and low temperature alarms</li> <li>Door ajar alarm</li> <li>Power failure alarm</li> </ul>			

#### Specifications

Model/Series	Operating Range	Doors	Bag or Box Capacity*	Volume (cu ft / liter)	Interior Dimensions (w x h x d) (in/mm)	Exterior Dimen- sions (w x h x d) (in/mm)	Shelves	Draw- ers	Compressor	Electrical	Net Weight
Refrigerators	;										
iB104-ADA i.Series	2º to 10ºC	1	66	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	0	2	.17 HP Air-Cooled R134A Non-CFC	115V 60Hz 5FLA	199 lb / 91 kg
HB104-ADA Horizon Series	2º to 10ºC	1	66	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	0	2	.17 HP Air-Cooled R134A Non-CFC	115V 60Hz 5FLA	193 lb / 88 kg
iB105 i.Series	2º to 10ºC	1	66	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	0	2	.17 HP Air-Cooled (115V) .25 HP Air-Cooled (230V) R134A Non-CFC	115V 60Hz 5FLA 230V 50Hz 4FLA 230V 60Hz 3.25FLA	205 lb / 93 kg
HB105 Horizon Series	2º to 10ºC	1	66	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	0	2	.17 HP Air-Cooled (115V) .25 HP Air-Cooled (230V) R134A Non-CFC	115V 60Hz 5FLA 230V 50Hz 4FLA 230V 60Hz 3.25FLA	199 lb / 91 kg
iLR104-ADA i.Series	2º to 10ºC	1	n/a	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	2	0	.17 HP Air-Cooled R134A Non-CFC	115V 60Hz 5FLA	191 lb / 87 kg
HLR104-ADA Horizon Series	2º to 10ºC	1	n/a	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	2	0	.17 HP Air-Cooled R134A Non-CFC	115V 60Hz 5FLA	185 lb / 84 kg
iLR105 i.Series	2º to 10ºC	1	n/a	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	.17 HP Air-Cooled (115V) .25 HP Air-Cooled (230V) R134A Non-CFC	115V 60Hz 5FLA 230V 50Hz 4FLA 230V 60Hz 3.25FLA	195 lb / 89 kg
HLR105 Horizon Series	2º to 10ºC	1	n/a	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	.17 HP Air-Cooled (115V) .25 HP Air-Cooled (230V) R134A Non-CFC	115V 60Hz 5FLA 230V 50Hz 4FLA 230V 60Hz 3.25FLA	189 lb / 86 kg
SLR104-ADA Scientific Series	2º to 10ºC	1	n/a	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	2	0	.17 HP Air-Cooled R134A Non-CFC	115V 60Hz 5FLA	161 lb / 74 kg
SLR105 Scientific Series	2º to 10ºC	1	n/a	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	.17 HP Air-Cooled (115V) .25 HP Air-Cooled (230V) R134A Non-CFC	115V 60Hz 5FLA 230V 50Hz 4FLA 230V 60Hz 3.25FLA	165 lb / 75 kg
Freezers											
iPF104-ADA i.Series	-15° to -30°C	1	44	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	0	2	.33 HP Air-Cooled R404A Non-CFC	115V 60Hz 5.75FLA	217 lb / 99 kg
HPF104-ADA Horizon Series	-15° to -30°C	1	44	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	0	2	.33 HP Air-Cooled R404A Non-CFC	115V 60Hz 5.75FLA	211 lb / 96 kg
iPF105 i.Series	-15⁰ to -30⁰C	1	44	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	0	2	.33 HP Air-Cooled R404A Non-CFC	115V 60Hz 5.75FLA 230V 50Hz 2.8FLA 230V 60Hz 3.1FLA	221 lb / 101 kg
HPF105 Horizon Series	-15º to -30℃	1	44	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	0	2	.33 HP Air-Cooled R404A Non-CFC	115V 60Hz 5.75FLA 230V 50Hz 2.8FLA 230V 60Hz 3.1FLA	215 lb / 98 kg
iLF104-ADA i.Series	-15° to -30°C	1	n/a	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	2	0	.33 HP Air-Cooled R404A Non-CFC	115V 60Hz 5.75FLA	211 lb / 96 kg
HLF104-ADA Horizon Series	-15° to -30°C	1	n/a	4/113	19.5 x 17.75 x 22 496 x 451 x 559	24 x 31.5 x 26.75 610 x 801 x 680	2	0	.33 HP Air-Cooled R404A Non-CFC	115V 60Hz 5.75FLA	205 lb / 93 kg
iLF105 i.Series	-15° to -30℃	1	n/a	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 R404A Non-CFC	115V 60Hz 5.75FLA 230V 50Hz 2.8FLA 230V 60Hz 3.1FLA	215 lb / 98 kg
HLF105 Horizon Series	-15° to -30℃	1	n/a	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 R404A Non-CFC	115V 60Hz 5.75FLA 230V 50Hz 2.8FLA 230V 60Hz 3.1FLA	209 lb / 95 kg

#### Warranty

Refrigerators

i.Series<sup>®</sup> / Rel.i<sup>™</sup> Plus 7 years compressor / 2 years parts / 1 year labor at Helmer

Horizon Series<sup>™</sup> and Scientific Series<sup>™</sup> / Rel.i<sup>™</sup> 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.

Freezer

#### i.Series<sup>®</sup> / Rel.i<sup>™</sup>

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

Horizon Series<sup>™</sup>

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

\*Capacity based on blood bag volume of 450ml · Meets AABB, ARC, and FDA standards for blood storage · Specifications subject to change 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. Product Data Sheets for all Undercounter Refrigerators and Freezers are available at www.helmerinc.com



#### **Optional Access Control**

#### i.Series®

## $i.D^{\textrm{\tiny M}}$ Integrated Electronic Access Control via $i.C^3{}_{\odot}$ User Interface



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.C<sup>3</sup> 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.

#### **Custom Storage Options**

- · Roll out baskets, wire shelves, drawers, and locking drawers
- · Two maximum storage locations 5 cf
- · Three maximum storage locations 4 cf

#### **Other Options**

- · Casters
- · Stainless steel interior and/or exterior
- · Glass door (refrigerators only)
- Interior LED light with on/off switch (refrigerators only)











#### Horizon Series<sup>™</sup> Integrated Access Control via Keypad



The Horizon Access Control keypad provides fail-secure digital keypad access. A lock is integrated

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

#### Accessories

#### Temperature Chart Recorder

7-day, inkless. Includes battery backup and a supply of 52 charts

#### **Chart Recorder Paper**

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

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

i.C<sup>3</sup> Screen Protectors Package of 3 clear screen protectors for use on i.C<sup>3</sup> User Interface

**USB Flashdrive** Use to download and upload information from/to the i.C<sup>3</sup>

Stacking Kit Hardware needed to stack 2 undercounter units

**Remote Lock Adapter Kit** Compatible with automated medication dispensing systems.

Floor and Wall Bracket Kit Secures refrigerator to the building floor and/or wall

#### Storage Trays

Simplify and organize your storage needs. Each tray comes with dividers and rails to customize individual storage areas.



Drawer Dividers - Upright and Angled (refrigerators only)

**Remote Alarms** Extends existing alarms to remote locations within the facility **IQ/OQ Documentation** 

Equipment validation guide

**Temperature Validation or Certificate of Calibration** Contact Helmer for information



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