

## Helmer Scientific, Noblesville, Indiana www.helmerinc.com

## **Technical Data Sheet** High-Performance, Medical-grade Refrigerator

Model: iLR125-GX, i.Series Laboratory / Upright

Application, Rating, & Electrical Data		
Application	High performance storage of medical and scientific products	
Storage Volume	25.2 cu ft   714 L	
Temperature Range	+2°C to +10°C	
Set Point	+4°C	
Electrical Power	115V 60Hz   220-240V 50/60Hz	
Maximum Current	2.8A   1.55A	
Facility Supply Rating	Branch circuit with earth ground, meeting plug/cord ratings as well as local electrical safety codes and requirements 110-120V AC: 15 A (minimum) 220-240V AC: 10 A (minimum)	
Power Plug/Power Cord Length	NEMA 5-15 hospital-grade   115V 60Hz, 8 to 10 ft (2.4-3.0m) Inquire about additional plug/cord options	
Certification/Agency Listing	QPS (Certified to UL and CSA Standards) IEC/UL61010-2-011: 2016   IEC 61010-1:2010, AMD1:2016 ETL certified to NSF/ANSI 456 Vaccine Storage Standard*	
Energy Star	Yes, ENERGY STAR® Certified High Performance Refrigerator	
Indoor/Outdoor Use	Indoor use only, non-residential	
Application Environment	Non-corrosive, non-flammable, non-explosive	
Ambient Operating Temperature	+15°C to +32°C   +59°F to +90°F	
Refrigeration		
Refrigeration System	VCC compressor-based, forced-air hydrocarbon	
Compressor	Hermetic, variable speed (VCC). Rated speed range: 1300-4000 rpm	
Condenser Type	Air-cooled fin and tube, sealed	
Expansion Device	Cap tube	
Evaporator Type	Direct expansion with forced-air fin and tube	
Defrost Method	Automatic	
Refrigerant	R600a, Isobutane, EPA SNAP compliant	
Controller / Configuration Settings		
User Interface	i.C3° color touchscreen, door mounted, 7in   177mm, °C or °F	
Power Switch	On/Off	
Controller Type	Microprocessor with touchscreen input & display	
Security	Lockable door, password protected settings, PIN access via optional access control	
Control Sensor	RTD, stainless steel	
Communication Ports	USB, Remote alarm contacts, RJ45 (Ethernet). API available for Ethernet connectivity development	
Power Failure Alarm	Yes	
High/Low Alarms - Tests	Yes, fully adjustable, automatic (Peltier) testing	
Door Ajar Alarm	Yes, fully adjustable	
Condenser Temperature Alarm	Yes, fully adjustable	
Min/Max Temperature	Yes, display and reset	
Download	Yes, via USB. CSV and PDF	
Event Log	Yes, all alarms, door openings, download via USB	
Temperature Log	Yes, download via USB	
Access Log	Yes, with optional access control, download via USB	
Interactive Temperature Graph	Yes	
Temperature Monitoring Ballast	Yes, two 4 oz bottles with screw caps, solid ballasts optional	
	V 201   1   0   1   1   1   1   1   1   1	

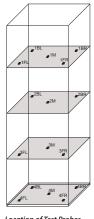
Performance Characteristics	
Uniformity   °C	+/-1.0
Recovery to 8°C after 3 min door opening   min	3
Stability   °C	0.05
Energy Consumption   kWh/day	3.09
Noise emission   dB	49
Heat Rejection / Emission   BTU/hr	915
Pull-down time to 4°C   min	43

All performance data from 25 cu ft refrigerator, 24.8°C ambient, 4.0°C

## Recovery after consecutive 8 second door openings Temperature °C mummum Elapsed Time (min)

## Typical Temperature Map

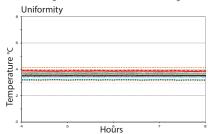
25 cu ft. Temperature Map °C



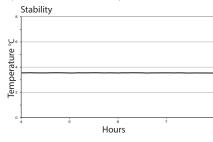
**Location of Test Probes** 

	AVG	MAX	MIN
1BL	3.5	3.5	3.5
1BR	3.2	3.2	3.2
1FL	3.7	3.8	3.7
1FR	4.1	4.2	4.1
1M	3.7	3.7	3.7
2BL	3.0	3.0	2.9
2BR	3.1	3.2	3.1
2M	3.5	3.5	3.4
3FL	3.6	3.7	3.6
3FR	3.9	4.0	3.9
3M	3.6	3.6	3.6
4BL	3.2	3.2	3.2
4BR	3.4	3.4	3.4
4FL	3.8	3.8	3.7
4FR	3.9	3.9	3.9
4M	3.4	3.5	3.4

\*Must be configured with NSF/ANSI 456 Vaccine Storage Certification option (includes Certificate of Calibration)



Battery Back-up



Yes, 20 hr display & alarm back up for i.C3® touchscreen | Rechargeable 12V, lead acid



Dimensions and Construction		
Interior (w x h x d)	24.7 x 58.1 x 30 in   628 x 1476 x 762 mm	
Exterior (w x h x d)	29 x 79.6 x 34.2 in   737 x 2021 x 867 mm	
Overall Exterior (w x h x d)	29.1 x 79.6 x 40 in   738 x 2021 x 1014 mm *add 0.5" to width if choosing optional access control *subtract 0.2" from depth for units prior to serial number 2150000	
Insulation	Sustainable, US EPA and SNAP approved foam	
Exterior/Interior Finish	Bacteria-resistant powder-coating	
Door	1, dual-pane glass, right-hinge	
Access Port	Top Access Port- for external monitoring probe(s) (0.75 in   19 mm diameter) Left Sidewall Port - with interior and exterior plugs (1.75 in   45 mm diameter)	
Interior Storage (w x d)	4 ventilated, powder coated shelves, adjustable 22.5 x 27.9 in   572 x 709 mm, 100 lb   46 kg max capacity/shelf	
Casters	Yes, swivel-locking	
Integrated Access Control	Optional- electromagnetic-lock with PIN entry via i.C3® user interface	
Net Weight	456 lb   207 kg	
Shipping Weight	546 lb   248 kg	
Clearance Requirements	Minimum of 8" (203mm) above and 3" (76mm) behind unit for proper ventilation, clearance, and feature access	
Options   Accessories	Integrated access control, Stainless steel interior, Chart recorder, Chart paper, Leveling feet, Solid ballast, Remote alarms, Remote lock adapter kit, Floor and Wall bracket kit, Seismic anchoring Kit, Storage trays, Screen protector, Locking drawer, Left-hinge door, Solid or heated glass door, Top cover, Side-wall access ports, NSF/ANSI 456 Vaccine Storage Certification (includes Certificate of calibration), Temperature validation, Validation guide (IQ/OQ), Certificate of calibration, Extended warranty	
Certificate of Calibration	Yes, available as an option, generated with an ISO 17025 certified, NIST traceable thermometer (Certificate of Calibration is included with the NSF/ANSI 456 Vaccine Storage Certification option)	
Warranty	Rel.i™ Plus Warranty- 7 years compressor, 2 years parts, 1 year labor Outside US and Canada- Contact your distributor for warranty information	



