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Helmer Scientific, Noblesville, Indiana www.helmerinc.com

Technical Data Sheet High-Performance, Medical-grade Refrigerator

Uniformity | °C

Stability | °C

Model: iLR105-GX, i.Series[®] Laboratory / Undercounter

Recovery to 8°C after 3 min door opening | min

Energy Consumption | kWh/day

Performance Characteristics (normal operating conditions)

+/-1.0

9

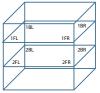
0.82

1.37

42

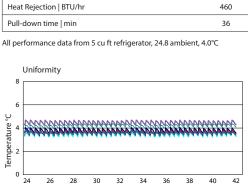
Application, Rating, & Electrical Data				
Application	High-performance storage of medical and scientific products			
Storage Volume	5.3 cu ft (150 L)			
Temperature Range	+2°C to +10°C			
Set Point	+4°C			
Electrical Power	115V 60Hz 220-240V 50/60Hz			
Maximum Current	1.4A 0.85A			
Facility Supply Rating	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			
ADA Compliant	Yes, fits under standard 34" high ADA compliant countertop			
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, 7 in 177 mm, °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, 4 oz bottle with screw cap, solid ballast optional			
Battery Back-up	Yes, 20 hr display and alarm back-up for i.C3® touchscreen Rechargeable 12V, lead acid			
*Must be configured with NSE/ANSI 456 Vaca	ine Storage Certification option (includes Certificate of Calibration)			

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Typical Temperature Map 5 cu ft Temperature Man (°C

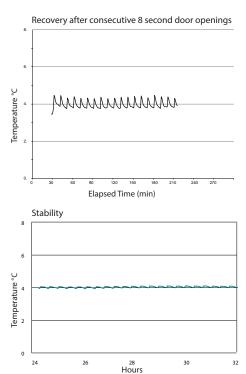
s cu n. remperature map (C)								
	1BL	1BR	1FL	1FR	2BL	2BR	2FL	2FR
Avg	3.6	3.5	4.1	3.9	4.5	3.8	4.4	3.9
Max	4.2	4.3	4.5	4.3	4.8	4.4	4.6	4.4
Min	3.2	3.1	3.7	3.6	4.2	3.4	4.1	3.6



Recovery to 8°C after 3 min door opening



Hours

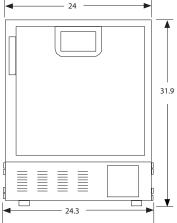


Noise emission | dB Heat Rejection | BTU/hr

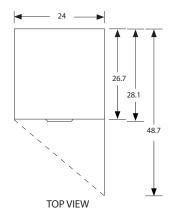
Location of test probes

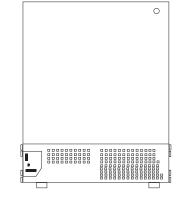
Dimensions and Construction					
Interior (w x h x d)	19.5 x 19.9 x 22.8 in 496 x 505 x 580 mm				
Exterior (w x h x d)	24 x 31.5 x 26.7 in 610 x 798 x 678 mm *Add 2.5" to the height if choosing optional casters.				
Overall Exterior (w x h x d)	24.3 x 31.9 x 28.1 in 616 x 809 x 714 mm *Add 0.2" to width if choosing optional access control *Includes leveling feet at lowest level, door handle, user interface, and access panels * The maximum height added with leveling feet at highest level or casters installed is 2" (51 mm)				
Insulation	Sustainable, US EPA and SNAP approved foam				
Exterior/Interior Finish	Bacteria-resistant powder-coating				
Door	Solid, field-reversible				
Access Port	Rear Access Port- for external monitoring probe(s) (0.75 in 19 mm diameter)				
Interior Storage (w x d)	2 ventilated, powder coated shelves, adjustable 17.9 x 21.3 in 454 x 541 mm, 100 lb 46kg max capacity/shelf				
Leveling Feet	Yes, adjustable *leveling feet or casters are required for operation				
Integrated Access Control	Optional- electromagnetic-lock with PIN entry via i.C3° user interface				
Net Weight	174 lb 79 kg				
Shipping Weight	235 lb 107 kg				
Clearance Requirements	Minimum 3" (76 mm) behind unit for plug/cord and feature access Front ventilation eliminates the need for top or side clearance				
Options Accessories	Integrated access control, Stainless steel exterior/interior, Chart recorder, Chart paper, Swivel/Locking casters, Solid ballast, Remote alarms, Remote lock adapter kit, Floor and Wall bracket kit, Stacking kit, Pedestal, Storage trays, Screen protector, LED light, Locking drawer, Left-hinge door, Glass door, 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				



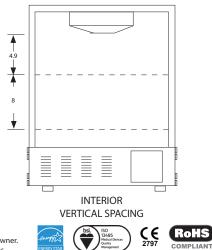


FRONT VIEW





BACK VIEW



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