

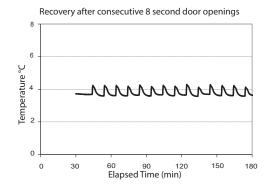
Helmer Scientific, Noblesville, Indiana www.helmerinc.com

Technical Data Sheet High-Performance, Medical-grade Refrigerator Model: iLR245-GX, i.Series[®] Laboratory / Upright

Application, Rating, & Electrical Data		
Application	High performance storage of medical and scientific products	
Storage Volume	44.9 cu ft 1271 L	
Temperature Range	+2°C to +10°C	
Set Point	+4°C	
Electrical Power	115V 60Hz 220-240V 50-60Hz	
Maximum Current	4.3A 2.5A	
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 doors, password protected settings	
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	
Interactive Temperature Graph	Yes	
Temperature Monitoring Ballast	Yes, two 4 oz bottles with screw caps, solid ballasts optional	
Battery Back-up	Yes, 20 hr display & alarm back up for i.C3® touchscreen Rechargeable 12V, lead acid	

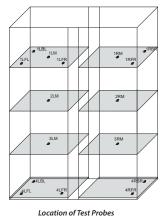
Performance Characteristics	
Uniformity °C	+/-1.0
Recovery to 8°C after 3 min door opening min	2
Stability °C	0.05
Energy Consumption kWh/day	3.77
Noise emission dB	52
Heat Rejection / Emission BTU/hr	1199
Pull-down time to 4°C min	47

All performance data from 45 cu ft refrigerator, 25°C ambient, 4.0°C.



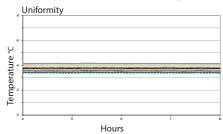
Typical Temperature Map

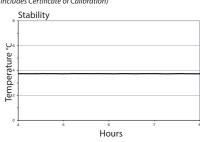
45 cu ft. Temperature Map ℃



	AVG	MAX	MIN
1LBL	3.4	3.5	3.4
1LFL	3.9	3.9	3.8
1LFR	3.8	3.8	3.7
1LM	3.5	3.6	3.5
1RBR	3.8	3.8	3.8
1RFR	4.1	4.2	4.1
1RM	3.9	3.9	3.8
2LM	3.4	3.4	3.4
2RM	3.7	3.8	3.7
3LM	3.4	3.4	3.4
3RM	3.8	3.9	3.8
4LBL	3.6	3.6	3.6
4LFL	4.1	4.1	4.1
4LFR	3.7	3.7	3.6
4RBR	3.7	3.7	3.6
4RFR	4.1	4.1	4.1

 ${}^*\!Must\,be\,configured\,with\,NSF/ANSI\,456\,Vaccine\,Storage\,Certification\,option\,(includes\,Certificate\,of\,Calibration)$







Dimensions and Construction		
Interior (w x h x d)	54.7 x 58.1 x 24 in 1390 x 1476 x 609 mm	
Exterior (w x h x d)	59 x 79.6 x 28 in 1499 x 2021 x 712 mm	
Overall Exterior (w x h x d)	59 x 79.6 x 34 in 1499 x 2021 x 862 mm *Includes handles and electrical box *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	2, dual-pane glass	
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)	8 ventilated, powder coated shelves, adjustable 22.5 \times 21.9 in 572 \times 557 mm, 100 lb 46 kg max capacity/shelf	
Casters	Yes, swivel-locking	
Net Weight	667 lb 303 kg	
Shipping Weight	787 lb 358 kg	
Clearance Requirements	Minimum of 8" (203mm) above and 3" (76mm) behind unit for proper ventilation, clearance, and feature access	
Options Accessories	Stainless steel interior, Chart recorder, Chart paper, Leveling feet, Solid ballast, Remote alarms, Floor and Wall bracket kit, Seismic anchoring kit, Storage trays, Screen protector, Locking drawer, Solid or heated glass doors, 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	



