



Helmer Scientific, Noblesville, Indiana
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Technical Data Sheet
High-Performance, Medical-grade Refrigerator
Model: HLR120-GX, Horizon Series™ Laboratory / Upright

Application, Rating, & Electrical Data	
Application	High performance storage of medical and scientific products
Storage Volume	20.2 cu ft 572 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
Building Supply Rating	15 A (minimum) branch circuit with earth ground
Power Plug/Power Cord Length	NEMA 5-15 hospital-grade 115V 60Hz, 8 to 10 ft (2.4-3.0 m) CEE (Schuko) 7/7 230V 50Hz, 8 to 10 ft (2.4-3.0 m) NEMA 6-15 hospital-grade 230V 60Hz, 8 to 10 ft (2.4-3.0 m)
Certification/Agency Listing	QPS (Certified to UL and CSA Standards) IEC/UL61010-2-01:2016 IEC 61010-1:2010, AMD1:2016
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	LED digital display, °C or °F
Power Switch	On/Off
Controller Type	Microprocessor-based with alarm/monitor
Security	Lockable door, PIN access via optional access control
Control Sensor	RTD, stainless steel
Communication Port	Remote alarm contacts
Power Failure Alarm	Yes
High/Low Alarms	Yes, fully adjustable
Door Ajar Alarm	Yes
Min/Max Temperature	Yes, display and reset
Temperature Monitoring Ballast	Yes, 4 oz bottle with screw cap, solid ballast optional
Battery Back-up	Yes, 9V, non-rechargeable, lithium

Performance Characteristics	
Uniformity °C	+/-1.0
Energy Consumption kWh/day	2.5
Noise emission dB	47
Heat Rejection / Emission BTU/hr	879

All performance data from 20 cu ft refrigerator, 24.8°C ambient, 4.0°C

Dimensions and Construction	
Interior (w x h x d)	24.7 x 58.1 x 24 in 628 x 1476 x 609 mm
Exterior (w x h x d)	29 x 78.3 x 28.2 in 737 x 1989 x 715 mm
Overall Exterior (w x h x d)	29.5 x 78.3 x 31.7 748 x 1989 x 803 mm
Insulation	Foam, non-CFC urethane
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 21.9 in 572 x 557 mm, 100 lb 46 kg max capacity/shelf
Casters	Yes, swivel-locking
Integrated Access Control	Optional- electromagnetic-lock with PIN entry via keypad
Net Weight	442 lb 201 kg
Shipping Weight	535 lb 243 kg
Clearance Requirements	Minimum of 8" (203mm) above and 3" (76mm) behind unit for 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, Storage trays, Locking drawer, Left-hinge door, Solid or heated glass door, Side-wall access ports, Certificate of calibration, Temperature validation, Validation guide (IQ/OQ), Extended warranty
Warranty	Rel.i™ Warranty- 5 years compressor, 2 years parts, 1 year labor Outside US and Canada- Contact your distributor for warranty information

