



Helmer Scientific, Noblesville, Indiana
www.helmerinc.com

Technical Data Sheet

High-Performance, Medical-grade Refrigerator

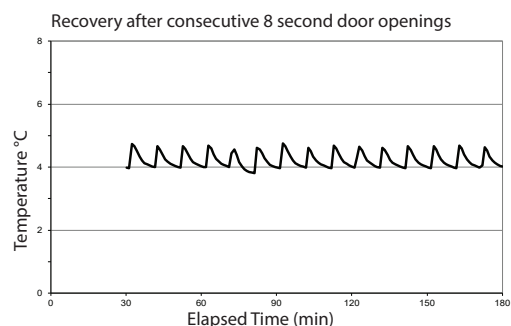
Certified to NSF/ANSI 456 Vaccine Storage Standard

Model: iPR120-GX, i.Series® Pharmacy / Upright

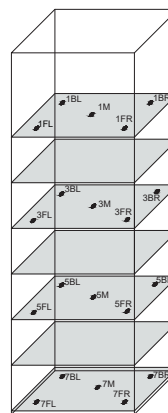
Application, Rating, & Electrical Data	
Application	High performance storage of medical and scientific products
Storage Volume	20.2 cu ft 572 L
Temperature Range	+2°C to +10°C
Set Point	+5°C
Electrical Power	115V 60Hz 220-240V 50/60Hz
Maximum Current	2.8A 1.55A
Facility Supply Rating	Branch circuit with 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
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	6
Stability °C	0.41
Energy Consumption kWh/day	3.01
Noise emission dB	49
Heat Rejection / Emission BTU/hr	879
Pull-down time to 5°C min	49

All performance data from 20 cu ft refrigerator, 24.8°C ambient, 5.0°C.
Meets temperature performance requirements as included in NSF/ANSI 456 Vaccine Storage Standard.



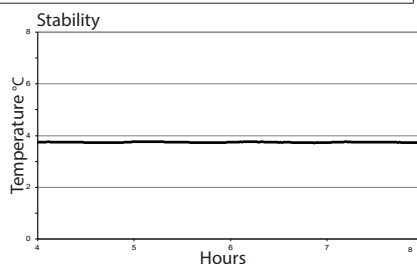
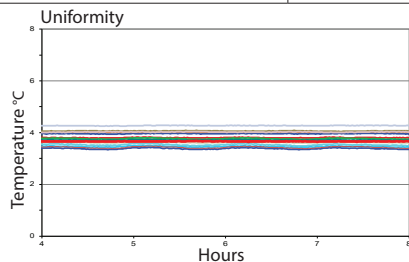
Typical Temperature Map



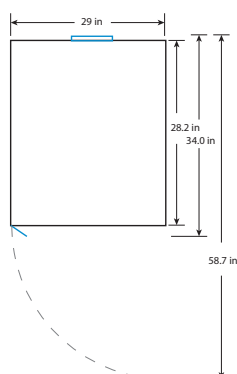
Location of Test Probes

20 cu ft. Temperature Map °C

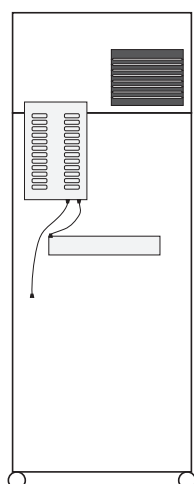
	AVG	MAX	MIN
1BL	4.9	5.1	4.7
1BR	4.7	5.3	4.5
1FL	5.1	5.3	4.9
1FR	5.3	5.4	5.1
1M	5.2	5.3	5.1
3BL	4.8	5.1	4.6
3BR	4.7	5.1	4.5
3FL	5.2	5.3	5.1
3FR	5.2	5.3	5.0
3M	5.1	5.3	5.0
5BL	4.6	4.8	4.4
5BR	4.7	4.9	4.5
5FL	5.1	5.2	4.9
5FR	5.1	5.3	5.0
5M	5.0	5.1	4.8
7BL	4.5	4.9	4.3
7BR	4.6	5.1	4.4
7FL	4.8	5.1	4.7
7FR	4.8	5.1	4.7
7M	4.8	5.0	4.6



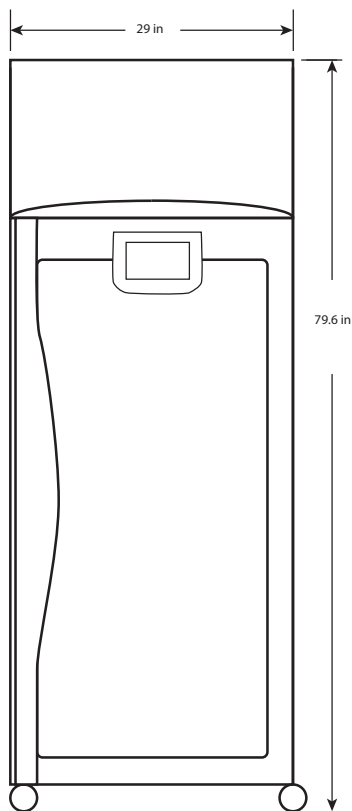
Dimensions and Construction	
Interior (w x h x d)	24.7 x 58.1 x 24 in 628 x 1476 x 609 mm
Exterior (w x h x d)	29 x 79.6 x 28.2 in 737 x 2021 x 715 mm
Overall Exterior (w x h x d)	29.1 x 79.6 x 34 in 738 x 2021 x 862 mm *add 0.5" to width if choosing optional access control *subtract 0.2" from depth 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 h x d)	1 ventilated, powder coated shelf, adjustable, 22.5 x 21.9 in 572 x 557 mm, 100 lb 46 kg max capacity/shelf 6 ventilated, powder coated, pull-out drawers, adjustable, 21.5 x 3.9 x 22 in 546 x 100 x 560 mm, 100 lb 46 kg max capacity/drawer
Casters	Yes, swivel-locking
Integrated Access Control	Optional- electromagnetic-lock with PIN entry via i.C3® user interface
Net Weight	438 lb 199 kg
Shipping Weight	528 lb 240 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, Temperature validation, Validation guide (IQ/OQ), Extended warranty
Certificate of Calibration	Yes, generated with ISO 17025 certified, NIST traceable thermometer
Warranty	Reli™ Plus Warranty- 7 years compressor, 2 years parts, 1 year labor Outside US and Canada- Contact your distributor for warranty information



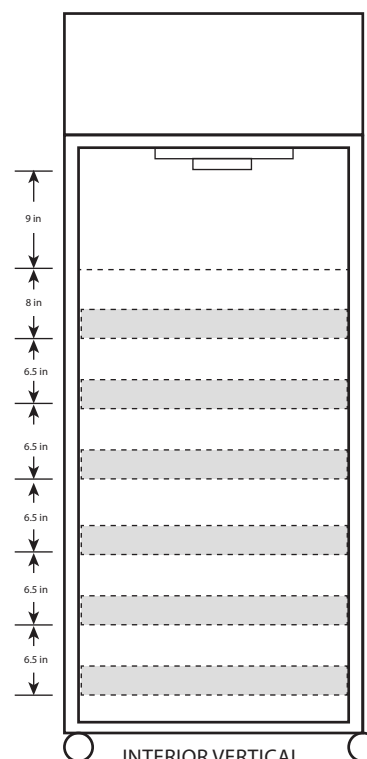
TOP VIEW



BACK VIEW



FRONT VIEW



INTERIOR VERTICAL SPACING