

Helmer Scientific, Noblesville, Indiana www.helmerinc.com

## Technical Data Sheet

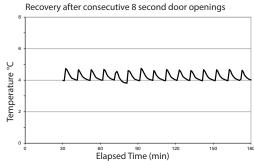
## High-Performance, Medical-grade Refrigerator

Model: HPR120-GX, Horizon Series™ Pharmacy / Upright

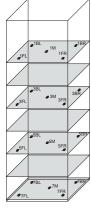
Application, Rating, & Electrical Data	
Application	High performance storage of medical and scientific products
Storage Volume	20.2 cu ft   572 L
Temperature Range	+2°C to +10°C
Set Point	+5°C
Electrical Power	115V 60Hz   220-240V 50/60Hz
Maximum Current	2.8A   1.55A
Facility Supply Rating	Branch circuit 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/UL61010-2-01: 2016   IEC 61010-1:2010, AMD1:2016
Energy Star	Yes
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 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
Recovery to 8°C after 3 min door opening   min	6
Stability   °C	0.41
Energy Consumption   kWh/day	3.04
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



Typical Temperature Map

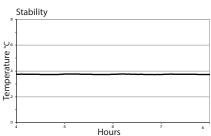


Location of Test Probes

	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

20 cu ft. Temperature Map ℃

8 -	Uniformity
6 -	
ν.	
Temperature °C	
erat	
ď.	
Pe .	
0 -	4 5 6 7 8
	Hours '





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 x 78.3 x 31.7   737 x 1989 x 803 mm *add 0.5" to width if choosing optional access control	
Insulation	Sustainable, US EPA, SNAP and GRAS 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 m), 100 lb   46 kg max capacity/drawer	
Casters	Yes, swivel-locking	
Integrated Access Control	Optional- electromagnetic-lock with PIN entry via keypad	
Net Weight	487 lb   221 kg	
Shipping Weight	580 lb   263 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, Seismic anchoring Kit, Storage trays, Locking drawer, Left-hinge door, Solid or heated glass door, Top cover, 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	



