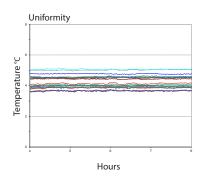


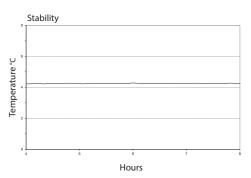
## Helmer Scientific, Noblesville, Indiana www.helmerinc.com

## Technical Data Sheet High-Performance, Medical-Grade Refrigerator Model: HLR113-GX, Horizon Series™ Laboratory / Upright

Application, Rating, & Electrical Data		
Application	High-performance storage of medical and scientific products	
Storage Volume	13.3 cu ft   377 L	
Temperature Range	+2°C to +10°C	
Set Point	+4°C	
Electrical Power	115V 60Hz   220-240V 50/60Hz	
Maximum Current	2.3A   1.12A	
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	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	

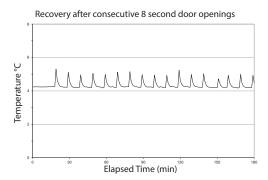
<sup>\*</sup>Must be configured with NSF/ANSI~456~Vaccine~Storage~Certification~option~(includes~Certificate~of~Calibration)





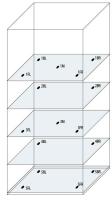
Performance Characteristics	
Uniformity   °C	+/-1.0
Recovery to 8°C after 3 min door opening   min	12
Stability   °C	0.68
Energy Consumption   kWh/day	2.47
Noise emission   dB	39
Heat Rejection / Emission   BTU/hr	751
Pull-down time to 4°C   min	49

All performance data from 13 cu ft refrigerator, 24.8°C ambient, 4.0°C



Typical Temperature Map

## 13 cu ft. Temperature Map ℃



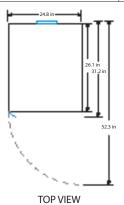
Location of Test Probes

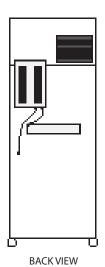
	AVG	MAX	MIN
1BL	4.1	4.0	4.1
1BR	4.1	4.1	3.9
1FL	5.0	5.1	4.9
1FR	5.1	5.1	5.0
1M	4.4	4.5	4.4
2BL	3.7	3.7	3.6
2BR	3.9	3.9	3.8
3FL	4.6	4.7	4.5
3FR	4.8	4.8	4.7
3M	4.0	4.0	3.9
4BL	3.7	3.8	3.6
4BR	4.0	4.1	3.9
5BL	3.9	4.0	3.8
5BR	3.9	4.0	3.8
5FL	4.5	4.6	4.4
5FR	4.5	4.6	4.5

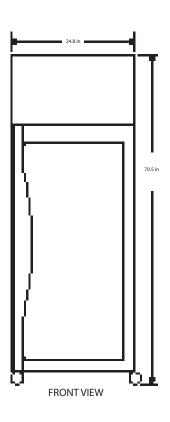


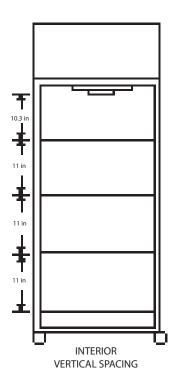
Dimensions and Construction		
Interior (w x h x d)	20 x 49.4 x 22.9 in   508 x 1255 x 583 mm	
Exterior (w x h x d)	24.8 x 70.5 x 26.1 in   628 x 1790 x 663 mm	
Overall Exterior (w x h x d)	24.9 x 70.5 x 31.2 in   631 x 1790 x 792 mm *add 0.5" to width if choosing optional access control, Includes handle 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	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 17.9 x 21.3 in   454 x 541 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	306 lb   139 kg	
Shipping Weight	373 lb   169 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, Locking drawer, Left-hinge door, Solid or heated glass door, Side-wall access ports, NSF/ANSI 456 Vaccine Storage Certification (includes Certificate of callibration), Temperature validation, Validation guide (IQ/OQ), Certificate of callibration, 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™ Warranty- 5 years compressor, 2 years parts, 1 year labor Outside US and Canada- Contact your distributor for warranty information	





















Helmer Scientific 380448-1/D 01/22