

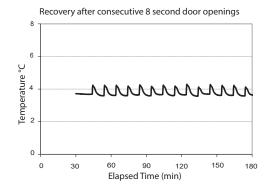
Helmer Scientific, Noblesville, Indiana www.helmerinc.com

Technical Data Sheet High-Performance, Medical-grade Refrigerator Certified to NSF/ANSI 456 Vaccine Storage Standard Model: iPR245-GX, i.Series* Pharmacy / Upright

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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	+5°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	10			
Stability °C	0.44			
Energy Consumption kWh/day	3.77			
Noise emission dB	52			
Heat Rejection / Emission BTU/hr	1199			
Pull-down time to 5°C min	64			

All performance data from 45 cu ft refrigerator, 25°C ambient, 5.0°C. Meets temperature performance requirements as included in NSF/ANSI 456 Vaccine Storage Standard.



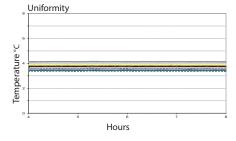
Typical Temperature Map

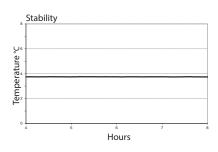
45 cu ft. Temperature Map °C

\angle					
1LFI	# 1LBL 1LFR			1RFR	#1RBR
	2LM	Z	/		
				₃ 3RM	
	≠ ^{4LM}				
				_ 5RM	
	∌ 6LM			₽ 6RM	
₽ ⁷ LF	7LBL 7LFR			7R 7RFR	BR. ø

Location of Test Probes

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	AVG	MAX	MIN			
1LBL	5.4	5.8	5.3			
1LFL	5.8	6.2	5.7			
1LFR	5.7	5.9	5.6			
1RBR	5.6	6.0	5.5			
1RFR	6.2	6.5	6.1			
2LM	5.4	5.7	5.2			
3RM	5.0	5.2	4.8			
4LM	4.5	4.7	4.2			
5RM	4.7	4.9	4.6			
6LM	4.4	4.6	4.2			
6RM	5.1	5.3	5.0			
7LBL	5.0	5.5	4.9			
7LFL	5.2	5.4	5.0			
7LFR	5.1	5.3	4.9			
7RBR	5.5	5.8	5.4			
7RFR	5.2	5.5	5.0			







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 h x d)	2 ventilated, powder coated shelves, adjustable 22.5 x 21.9 in 572 x 557 mm, 100 lb 46 kg max capacity/shelf 12 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
Net Weight	775 lb 352 kg
Shipping Weight	895 lb 407 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, Temperature validation, Validation guide (IQ/OQ), Extended warranty
Certificate of Calibration	Yes, generated with ISO 17025 certified, NIST traceable thermometer
Warranty	Rel.i™ Plus Warranty - 7 years compressor, 2 years parts, 1 year labor Outside US and Canada - Contact your distributor for warranty information



