

Helmer Scientific, Noblesville, Indiana www.helmerinc.com

Technical Data Sheet High-Performance, Medical-grade Freezer Model: iLF105-GX, i.Series® Laboratory / Undercounter

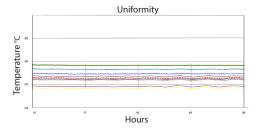
Application, Rating, & Electrical Data		
Application	High-performance storage of medical and scientific products	
Storage Volume	5.3 cu ft (150 L)	
Temperature Range	-15° to -30℃	
Set-Point	-30°C	
Electrical Power	115V 60Hz 220-240V 50/60Hz	
Maximum Current	4.1A 2.0A	
Facility Supply Rating	Branch circuit 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 Freezer	
ADA Compliant	Yes, fits under standard ADA compliant countertop	
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: 1600-4000 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	R290 , Propane, EU F-Gas and EPA SNAP compliant	
Controller / Configuration Settings		
User Interface	i.C³® color touchscreen, door-mounted, 7 in 177 mm, °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 in PDF or CSV format	
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	Yes, 4 oz bottle with screw cap	
Battery Back-up	Yes, 20 hr display and alarm back-up for i.C3® touchscreen Rechargeable 12V, lead a	

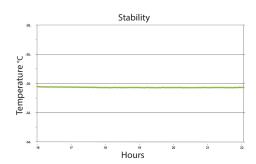
*Must be configured with NSF/ANSI 456 Vaccine Storage Certification option (includes Certificate of Calibration	n)
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Performance Characteristics (normal operating conditions)		
Uniformity °C	+/-2.0	
Recovery to 29.5°C after 1 min door opening min	23	
Stability °C	0.1	
Energy consumption kWh/day	3.99	
Noise emission dB	46	
Heat rejection BTU/hr	1701	
Pull-down time to -30°C min	70	

All performance data from 5 cu ft freezer, 25°C ambient, -30.0°C









Dimensions and Construction		
Interior (w x h x d)	19.5 x 19.9 x 22.8 in 496 x 505 x 580 mm	
Exterior (w x h x d)	$24 \times 31.5 \times 26.7$ in \mid 610 \times 798 \times 678 mm *Add 2.5" to the height if choosing optional casters.	
Overall Exterior (w x h x d)	24.3 x 31.9 x 28.4 in 617 x 809 x 721 mm *Add 0.3" to width if choosing optional access control *Includes leveling feet, door handle, user interface, and access panels. *The maximum height added with leveling feet at highest level or casters installed is 2" (51 mm)	
Insulation	Sustainable, US EPA, and SNAP approved foam	
Exterior/Interior Finish	Bacteria-resistant powder-coating	
Door	Solid, field-reversible	
Access Port	Rear Access Port- for external monitoring probe(s) (0.75 in 19 mm diameter)	
Interior Storage (w x d)	2 ventilated, powder coated shelves, adjustable 17.9 x 21.3 in 454 x 541mm, 100 lb 46 kg max capacity/shelf	
Leveling Feet	Yes, adjustable	
Integrated Access Control	Optional - electromagnetic-lock with PIN entry via i.C ³ ® user interface	
Net Weight	179 lb 82 kg	
Shipping Weight	240 lb 110 kg	
Clearance Requirements	Minimum 3" (76 mm) behind unit for for plug/cord and feature access Front ventilation eliminates the need for top or side clearance	
Options Accessories	Integrated access control, Stainless steel exterior/interior, Chart recorder, Chart paper, Swivel/ Locking casters, Remote alarms, Remote lock adapter kit, Floor and Wall bracket kit, Stacking kit, Pedestal, Ventilated drawer, Storage trays, Screen protector, Left-hinge door, NSF/ANSI 456 Vaccine Storage Certification (includes Certificate of calibration), Temperature validation, Validation guide (IQ/OQ), Certificate of Calibration, 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	



