## elmer ENTIFIC

Helmer Scientific, Noblesville, Indiana www.helmerinc.com

## **Technical Data Sheet** High-Performance, Medical-grade Refrigerator

Uniformity | °C

Stability | °C

Model: iLR105-GX, i.Series<sup>®</sup> Laboratory / Undercounter

Recovery to 8°C after 3 min door opening | min

Energy Consumption | kWh/day

Performance Characteristics (normal operating conditions)

+/-1.0

9

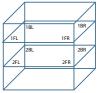
0.82

1.37

42

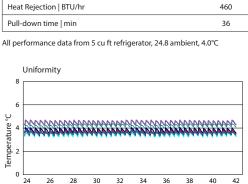
| Application, Rating, & Electrical Data     |   |  |  |  |
|--|---|--|--|--|
| Application                                | High-performance storage of medical and scientific products   |  |  |  |
| Storage Volume                             | 5.3 cu ft   (150 L)   |  |  |  |
| Temperature Range                          | +2°C to +10°C   |  |  |  |
| Set Point                                  | +4°C  |  |  |  |
| Electrical Power                           | 115V 60Hz   220-240V 50/60Hz  |  |  |  |
| Maximum Current                            | 1.4A   0.85A  |  |  |  |
| Facility Supply Rating                     | Branch circuit with earth ground, meeting plug/cord ratings as well as local electrical safety codes and requirements<br>110-120V AC: 15 A (minimum)<br>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)<br>Inquire about additional plug/cord options   |  |  |  |
| Certification/Agency Listing               | QPS (Certified to UL and CSA Standards)<br>IEC/UL61010-2-011: 2016   IEC 61010-1:2010, AMD1:2016<br>ETL certified to NSF/ANSI 456 Vaccine Storage Standard*                         |  |  |  |
| Energy Star                                | Yes, ENERGY STAR <sup>®</sup> Certified High Performance Refrigerator   |  |  |  |
| ADA Compliant                              | Yes, fits under standard 34" high 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: 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, 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. 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, 4 oz bottle with screw cap, solid ballast optional   |  |  |  |
| Battery Back-up                            | Yes, 20 hr display and alarm back-up for i.C3® touchscreen   Rechargeable 12V, lead acid  |  |  |  |
| *Must be configured with NSE/ANSI 456 Vaca | ine Storage Certification option (includes Certificate of Calibration)  |  |  |  |

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



Typical Temperature Map 5 cu ft Temperature Man (°C

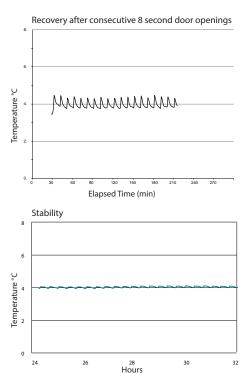
| s cu n. remperature map ( C) |     |     |     |     |     |     |     |     |
|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                              | 1BL | 1BR | 1FL | 1FR | 2BL | 2BR | 2FL | 2FR |
| Avg                          | 3.6 | 3.5 | 4.1 | 3.9 | 4.5 | 3.8 | 4.4 | 3.9 |
| Max                          | 4.2 | 4.3 | 4.5 | 4.3 | 4.8 | 4.4 | 4.6 | 4.4 |
| Min                          | 3.2 | 3.1 | 3.7 | 3.6 | 4.2 | 3.4 | 4.1 | 3.6 |



Recovery to 8°C after 3 min door opening



Hours



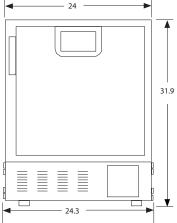
Noise emission | dB Heat Rejection | BTU/hr

Location of test probes

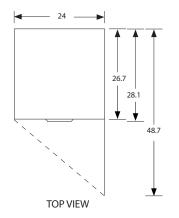
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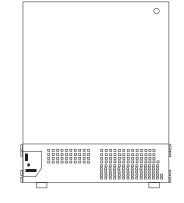
| Dimensions and Construction  |  |  |  |  |  |
|------------------------------|--|--|--|--|--|
| Interior (w x h x d)         | 19.5 x 19.9 x 22.8 in   496 x 505 x 580 mm   |  |  |  |  |
| Exterior (w x h x d)         | 24 x 31.5 x 26.7 in   610 x 798 x 678 mm<br>*Add 2.5" to the height if choosing optional casters.  |  |  |  |  |
| Overall Exterior (w x h x d) | 24.3 x 31.9 x 28.1 in   616 x 809 x 714 mm<br>*Add 0.2" to width if choosing optional access control<br>*Includes leveling feet at lowest level, door handle, user interface, and access panels<br>* 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<br>17.9 x 21.3 in   454 x 541 mm, 100 lb   46kg max capacity/shelf   |  |  |  |  |
| Leveling Feet                | Yes, adjustable<br>*leveling feet or casters are required for operation  |  |  |  |  |
| Integrated Access Control    | Optional- electromagnetic-lock with PIN entry via i.C3° user interface   |  |  |  |  |
| Net Weight                   | 174 lb   79 kg   |  |  |  |  |
| Shipping Weight              | 235 lb   107 kg  |  |  |  |  |
| Clearance Requirements       | Minimum 3" (76 mm) behind unit for plug/cord and feature access<br>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, Solid ballast, Remote alarms, Remote lock adapter kit, Floor and Wall bracket kit, Stacking kit, Pedestal, Storage trays, Screen protector, LED light, Locking drawer, Left-hinge door, Glass 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<br>(Certificate of Calibration is included with the NSF/ANSI 456 Vaccine Storage Certification option)  |  |  |  |  |
| Warranty                     | Rel.i <sup>™</sup> Plus Warranty- 7 years compressor, 2 years parts, 1 year labor<br>Outside US and Canada- Contact your distributor for warranty information  |  |  |  |  |



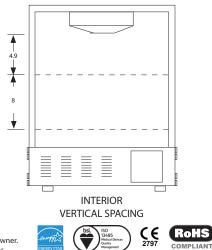


FRONT VIEW





BACK VIEW



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