

Application, Rating, and Electrical Data	
Application	Precision temperature storage for biopharmaceutical and life science research applications
Storage Volume	5.3 cu ft (150 L)
Temperature Range	-15° to -30°C
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
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

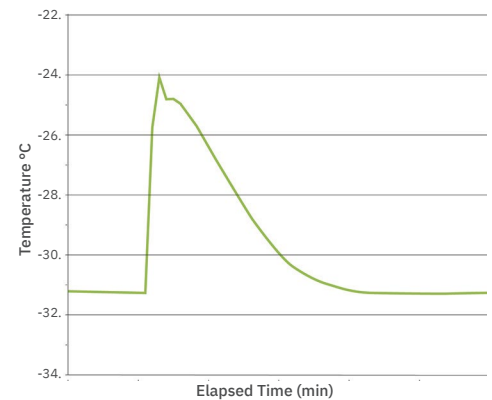
Refrigeration	
Refrigeration System	VCC compressor-based, forced-air hydrocarbon
Compressor	Hermetic, variable speed (VCC). Rated speed range: 1600-4000 rpm
Condenser Type	Air-cooled fin and tube, sealed
Expansion Device	Cap tube
Evaporator Type	Direct expansion with forced-air fin and tube
Defrost Method	Automatic
Refrigerant	R290, EPA SNAP and EU F-Gas compliant natural hydrocarbon refrigerant

Controller / Configuration Settings	
User Interface	LED digital display, °C or °F
Power Switch	On/Off
Controller Type	Microprocessor with touchscreen input & display
Security	Lockable exterior door, locking interior drawers available as accessory
Control Sensor	RTD, stainless steel
Communication Port	Remote alarm contacts
Power Failure Alarm	Yes
High/Low Alarms	Yes, fully adjustable
Door Ajar Alarm	Yes, fully adjustable
Condenser Temperature Alarm	Yes, fully adjustable
Min/Max Temperature	Yes, display and reset
Temperature Monitoring	Yes, 4oz bottle with screw cap
Battery Back-up	Yes, 9 V non-rechargeable, lithium

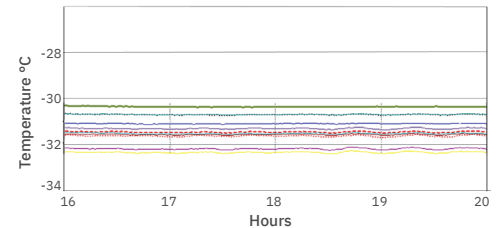
Performance Characteristics (normal operating conditions)	
Uniformity °C	+/-2.0
Recovery to 29.5°C after 1 min door opening min	23
Stability °C	0.1
Energy consumption kWh/day	3.99
Noise emission dB	46
Heat rejection BTU/hr	1701
Pull-down time to -30°C min	70

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

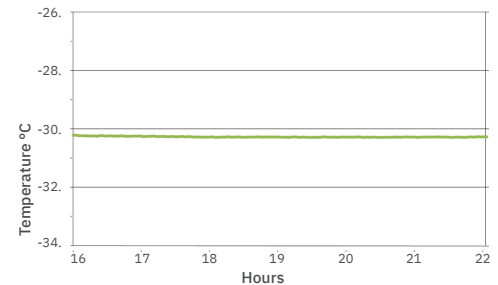
Recovery After 1 Minute Door Opening



Steady-State Uniformity



Steady-State Stability



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 *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 *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	EPA SNAP and EU F-Gas compliant insulation and foaming agents
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
Mobility	Easily movable locking casters
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
Available Accessories	Remote alarms, remote lock adapter kit, floor and wall seismic bracket kits, stacking kit, pedestal, storage trays, locking interior drawers, certificate of calibration, temperature validation, validation guide (IQ/OQ), extended warranty
Certificate of Calibration	Yes, available as an option, generated with an ISO 17025 certified, NIST traceable thermometer
Warranty	3 years compressor, 2 years parts, 1 year labor (Outside US/Canada: Please consult with your local representative for labor warranty information.)

