## Application, Rating, & Electrical Data

Application	High-performance storage of blood and other medical and scientific products
Storage Volume	13.3 cu ft (377 L) | 198 Blood bags
Temperature Range	+2℃ to +10℃
Set Point	+4℃
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
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℃ to +32℃ | +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, ℃ 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
Chart Recorder	Yes, integrated, 4" (102mm) diameter, inkless pressure-sensitive charts, backup battery
Temperature Monitoring Ballast	Yes, 4 oz bottle with screw cap, solid ballast optional
Battery Back-up	Yes, 20 hr display & alarm back up for i.C3® touchscreen | Rechargeable 12V, lead acid

Performance Characteristics

Uniformity | ℃	+/-1.0
Recovery to 8℃ after 3 min door opening | min	10
Stability | ℃	0.68
Energy Consumption | kWh/day	2.69
Noise emission | dB	39
Heat Rejection / Emission | BTU/hr	751
Pull-down time to 4℃ | min	72

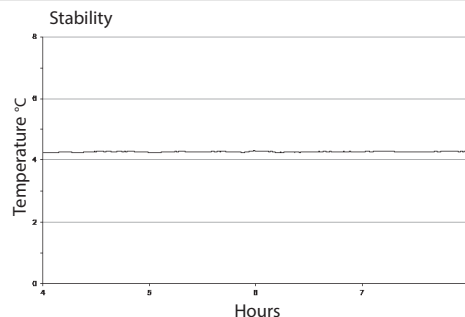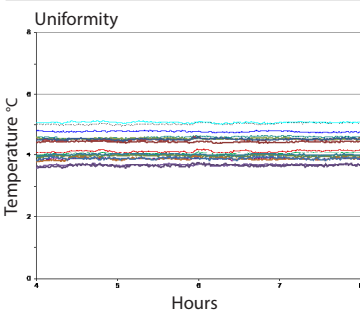All performance data from 13 cu ft refrigerator, 24.8℃ ambient, 4.0℃

Recovery after consecutive 8 second door openings
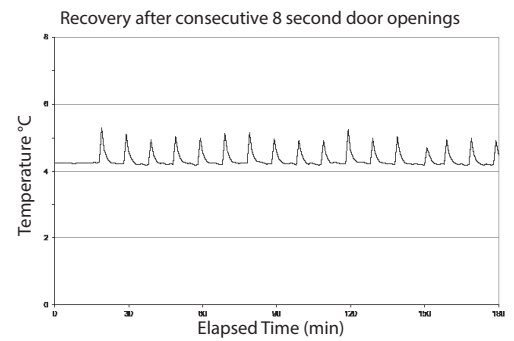

Typical Temperature Map
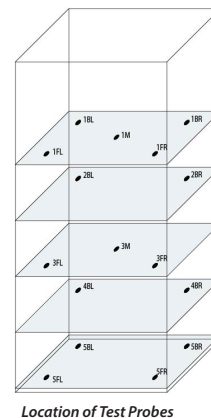
13 cu ft. Temperature Map ℃

	AVG	MAX	MIN
1BL	4.4	4.5	4.3
1BR	4.0	4.1	3.9
1FL	4.4	4.5	4.3
1FR	4.8	4.9	4.7
1M	4.4	4.5	4.3
2BL	4.2	4.3	4.1
2BR	4.1	4.2	4.0
3FL	4.3	4.4	4.2
3FR	4.1	4.2	4.1
3M	4.1	4.2	4.1
4BL	3.9	3.9	3.8
4BR	4.0	4.1	3.9
5BL	4.0	4.1	3.9
5BR	4.0	4.0	3.9
5FL	4.0	4.2	3.9
5FR	4.2	4.2	4.1

Location of Test Probes

Uniformity


Stability

Dimensions and Construction

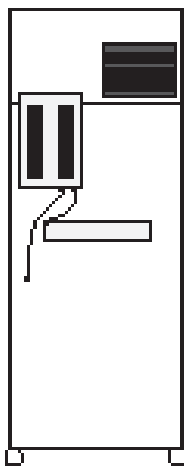|	
Interior (w x h x d)	20 x 49.4 x 22.9 in | 508 x 1255 x 583 mm
Exterior (w x h x d)	24.8 x 70.5 x 26.2 in | 628 x 1790 x 664 mm
Overall Exterior (w x h x d)	24.9 x 70.5 x 31.2 in | 631 x 1790 x 792 mm *add 0.5" to width if choosing optional access control, Includes handle and electrical box *subtract 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)
Interior Storage (w x h x d)	5 drawers, liquid-tight, stainless steel, adjustable, 16.7 x 3.8 x 19.2 in | 424 x 97 x 488 mm, 100 lb | 46 kg max capacity/drawer
Casters	Yes, swivel-locking
Integrated Access Control	Optional- electromagnetic-lock with PIN entry via i.C3® user interface
Net Weight	342 lb | 156 kg
Shipping Weight	409 lb | 186 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 paper, Leveling feet, Solid ballast, Remote alarms, Remote lock adapter kit, Floor and Wall bracket kit, Seismic anchoring kit, Storage trays, Screen protector, Locking drawer, Drawer dividers, Left-hinge door, Solid or heated glass door, Side-wall access ports, Certificate of calibration, Temperature validation, Validation guide (IQ/OQ), Extended warranty
Warranty	Rel.i™ Plus Warranty- 7 years compressor, 2 years parts, 1 year labor Outside US and Canada- Contact your distributor for warranty information
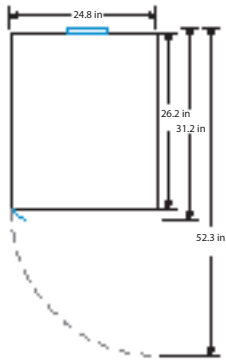
TOP VIEW
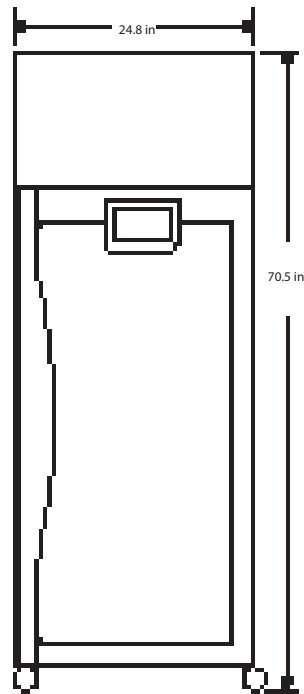
FRONT VIEW
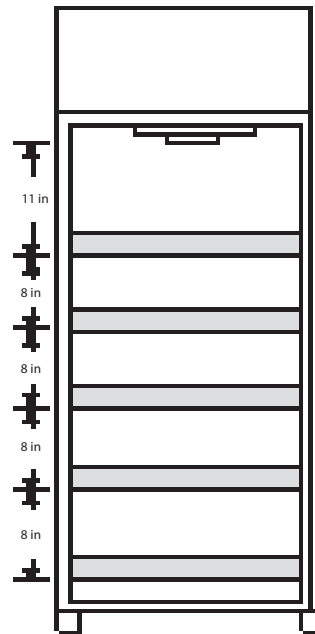
INTERIOR VERTICAL SPACING

BACK VIEW