



Application & Basic Data

Application	Life Sciences, Biotech/Biopharm, Biorepository, Industrial, University and Government, Research Laboratory, Vaccine Storage, Pharmacy
Storage Volume	110 L (3.9 cu ft)
Temperature Range	-40~-86°C
Set-Point	-80°C
Amperage	9.4
Electrical Power	115 V
Facility Supply Rating	Branch circuit with earth ground, compliant with plug ratings and local electrical codes. 110-120V AC: 20 A (minimum)
Power Plug/Power Cord Length	NEMA 5-20P; 82ft Cord
Certifications	UL
Application Environment	Non-hazardous
Ambient Temperature & R.H.	80°F / 27°C / 55% R.H.

Refrigeration System

Refrigeration System	Direct Cooling, Cascade
Compressor	Variable Speed, 2,000 to 4,500 RPM
Condenser Type	Finned Condenser
Expansion Device	Capillary Tube
Evaporator Type	Cold Wall
Defrost Method	Manual
Refrigerant	R600a / R1150 / R50

Performance Information

Uniformity °C	(+/-) 1.6
Recovery to -80°C after 1 min door opening min	17.5
Stability °C	2
Energy consumption kWh/day	4.48
Noise emission dB	47
Pull-down time to -80°C min	103

Controller / Configuration Settings

User Interface	UltraVU™ 10 inch full color touch screen
Power Switch	On/Off
Controller Type	Custom Machine Microprocessor
Security	1. Door Lock with Key 2. Latch for padlock 3. Password Protected 4. Optional fingerprint/ID card w/ electronic locks
Control Sensor	PT-1000
Communication Port	Remote alarm dry contacts
Power Failure Alarm	Yes
High/Low Alarm	Yes
Door Ajar Alarm	Yes
Min/Max Temperature	Yes
Download	USB
Chart Recorder	Optional
Event Log	Yes
Temperature Log	1. The default interval for USB data logging is 10 minutes 2. By default, data that has not been exported is exported. A maximum of 12 months of data can be exported.
Access Log	Yes
Interactive Temperature Graph	Yes
Product Simulator	Yes, Glycol Solution
Battery Backup	Yes, 4 hours for alarm and data logger

Dimensions and Construction

Exterior (w x d x h inches)	37.6 x 26.1 x 32.1
Interior (w x d x h inches)	17.13 x 16.77 x 22.91
Insulation	Vacuum Insulated Panels (VIP) & Polyurethane
Exterior Finish	Powder Coated Steel
Interior Finish	Powder Coated Steel
Casters	4
Doors	1 Hinged, Solid Door
Access Port	Yes
Shelves	1, Stainless Steel
LED Health Light	Yes - Green Ok / Yellow Warning / Red Urgent
Integrated Access Control	Optional - electronic-lock with PIN entry
Net Weight (lbs)	263
Shipping Weight (lbs)	304
Clearance Requirements	Minimum of 3" behind back and along sides of unit for proper ventilation
Options Accessories	Integrated access control, stainless steel interior, chart recorder, remote alarms, floor and wall bracket kit, floor anchoring kit, storage trays, ULT racks, USB drive for downloading, left-hinge door, certificate of calibration, temperature validation, validation guide (IQ/OQ), extended warranty
Warranty	Migali® Protection Plan: 5 years compressor, 5 years parts, 5 year labor For purchases outside US and Canada- Contact your distributor for warranty information



Temp. Fluctuation



Daily Consumption



Cooling Time

**Typical data based on internal prototype testing with set point at -80°C and ambient temperature at 25°C, may vary between units.*

Highlighted Features



Dimensional Drawings

