Portable Ultra-Low Temperature Storage

Item #F6015

Point of Distribution COVID-19 Vaccination Storage -20˚C to -86˚C

Industry's widest ULT temperature range -20°C to -86°C

Convenient design safeguards temperature-sensitive medical treatments regardless of patient location

- Lightweight, portable design makes this a perfect appliance for clinical point-of-use cold storage
- Superior Stirling engine reliability scales down to a remarkably small footprint and weight (21 kg, 46 lbs), without sacrificing performance
- Provides industry's widest ultra-low temperature range of -20°C to -86°C
- Adaptable power input provides operational flexibility between standard AC main outlets, worldwide, as well as vehicle-based **12V DC** power or external battery devices
- Utilizes 100% natural refrigerants to support sustainable, environmentally-friendly operations
- Optional SenseAnywhere wireless temperature logging allows for remote monitoring via cloud-based software
- Ample storage capacity for thousands of 2mL vials within a surprising compact frame

Uniquely portable and reliable ultra-low ULT25NEU storage benefits scientists, clinicians and patients alike

- Safely preserve and deliver biologic drugs and vaccines at the point of patient care, anywhere in the world
- Easily deploy long-term storage of viable biological materials, with low power use in any form - battery, 12V vehicle power, or solar panel
- Collect temperature-sensitive samples and specimens at remote trial or field locations
- Remain confident in performance with a one-year warranty for parts and service in the U.S. and Canada

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Model Specifications

APPLICATION, RATING AND ELECTRIC DATA

Application	Storage of general (non-flammable) laboratory materials
Storage Volume	25 liters (0.9 cu.ft.)
Storage Capacity	18 standard 2" boxes
Temperature Range	-20°C to -86°C @ 32°C (90°F) ambient, uniformity -3°C at -80°C top to bottom, adjustable in 1°C increments Presets for -86°C (default), -40°C and -20°C
Electric Power	100V to 240VAC at either 50 or 60Hz or 12V DC from mobile source
Maximum Power (Current)	280 watts (4 amps @120VAC, 2 amps @240VAC, 15 amps @ 12V DC)
Auto-Voltage Capability	100V to 240V, 50 or 60 Hz
Electric Supply Rating	15 amp or greater grounded circuit
Power Plugs Available	NEMA 5-15P plug requires standard NEMA 5-15R receptacle (120V); Length: 2261 mm (89 in.), or NEMA 5-15P plug requires standard NEMA 15R receptable (120V); Length: 3048 mm (120 in.), or NEMA 6-15P plug requires standard NEMA 6-15R receptacle (240V); Length: 2997 mm (118 in.) *Specify when ordering*
Certification/Agency Listing	CE, cTÜVus
Noise	Advanced noise abatement, <48 dB(A) at 1 meter
Indoor/Outdoor Use	Indoor use only
Environmental Conditions	Non-corrosive, non-flammable, non-explosive, indoor use, altitude up to 2,000m, temperature 5°C to 40°C (41°F to 104°F), maximum relative humidity 80% for temperature up to 31°C decreasing linearly to 50% at 40°C

CONTROLLER

Controller Type	Microprocessor controls
Security	Lockable lid
Warm and Cold Alarms	Setpoint ± 10°C
Control Sensor	One RTD (PT100 Class A)
Dry Contacts	Optional
Internet Connectivity	Optional SenseAnywhere wireless temperature monitoring and logging

REFRIGERATION SYSTEM

Cooling Engine	Helium charged free-piston Stirling engine with continuous modulation
Heat Transport System	Gravity driven thermosiphon
Refrigerant	R-170 (Ethane) 10 - 12 grams
Evaporator	Cold wall (inner liner)
Heat Rejection	Finned heat exchanger with forced air cooling Air inlet: Right front side of unit Air outlet: Below control panel of front mechanical compartment
Defrost Method	Manual

PERFORMANCE DATA

Steady State Energy Use at 25ºC Ambient	2.8 kWh/day (average power 118 watts) at -80°C (Empty Cabinet)
Pull-Down from 25°C Ambient	4 hours to -80°C (Empty Cabinet)
Recovery from 1 minute lid opening	20 minutes to -80°C (Empty Cabinet)
Warm-up Profile	30 minutes to -60°C (Empty Cabinet) 70 minutes to -40°C (Empty Cabinet)
Heat Dissipation	403 BTU/h (load to HVAC) (Empty Cabinet)

DIMENSIONS AND CONSTRUCTION

Interior (L x W x D)	332 x 221 x 340 mm / (13.1 x 8.7 x 13.4 in.)
Exterior (L x W x D)	692.5 x 350 x 460 mm / (27.3 x 13.8 x 18.1 in.
Net Weight, Empty	21 kg (46 lbs.), nominal
Shipping (L x W x D)	762 x 457 x 559 mm / (30 x 18 x 22 in.)
Shipping Weight	24 kg (53 lbs.)
Insulation	High performance vacuum insulated panels and polyurethane foam
Gasket Heater	Non-user programmable duty cycle
Options	Plastic Utility Bin, AC Power Cords, Mobile Power DC Cord, Sub-Lid, Certificate of Calibration, Temperature Mapping Validation, Remote Alarm Contacts

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TECHNICAL DATA SHEET
MODEL F6015

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Control Sensor	One RTD (PT100 Class A)
Dry Contacts	Optional
Temperature Log	30 days available graphically
Internet Connectivity	Optional SenseAnywhere wireless temperature monitoring and logging
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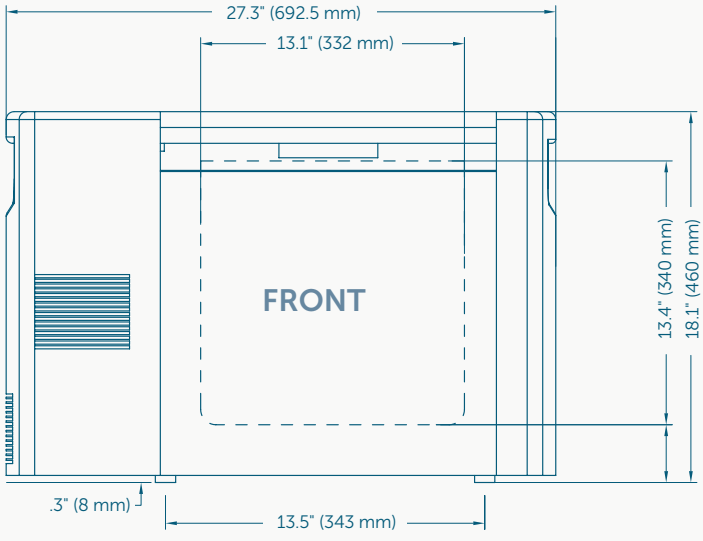
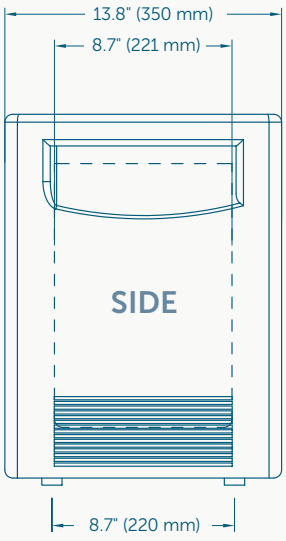
SIDE





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