

# Model ULT25NEU

## Ultra-Low Temperature Storage Anywhere

Ideal for Clinical Storage of Temperature-Sensitive Medications and Treatments



### Safeguards Temperature-Sensitive Treatments at any Patient Location

- ✓ Weighs Only 46 lbs. (21kg) – Great for Point of Use Storage
- ✓ Superior Stirling Engine Reliability
- ✓ Available with SenseAnywhere Wireless Temperature Monitoring and Logging
  - Track and log ULT25NEU temperature, ambient conditions, automatic data transfers to a secure Cloud
- ✓ Universal Input Power from Standard AC Mains to Vehicle-Based 12V DC
- ✓ Industry's Widest Temperature Range: -86°C to -20°C
- ✓ Storage Capacity for 18 Standard 2" Boxes

ULT25NEU Portable Freezer, .9 cu.ft. (25 liters).  
A one year warranty for parts and labor is standard worldwide.

### The benefits of the ULT25NEU reach all levels in the clinical and laboratory environment

- Lightweight, small footprint – perfect for point of use storage in labs and clinical sites
- Optional wireless temperature transmissions make monitoring samples easy
- Plugs into any type AC outlet, as well as 12V DC power for use anywhere
- Ultra-low power consumption and 100% natural, SNAP-compliant refrigerants
- Low maintenance needs – simply clean filter for optimum performance



STIRLING  
ULTRACOLD



# Model ULT25NEU Specifications

## Application, Rating and Electric Data

<b>Application</b>	Storage of general (non-flammable) laboratory materials
<b>Storage Volume</b>	25 liters (0.9 cu.ft.)
<b>Storage Capacity</b>	18 standard 2" boxes
<b>Temperature Range</b>	-86°C to -20°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
<b>Electric Power</b>	100V to 240VAC at either 50 or 60Hz or 12V DC from mobile source
<b>Maximum Power (Current)</b>	280 watts (4 amps @ 120VAC, 2 amps @ 240VAC, 15 amps @ 12V DC)
<b>Auto-Voltage Capability</b>	100V to 240V, 50 or 60 Hz
<b>Electric Supply Rating</b>	15 amp or greater grounded circuit
<b>Power Plugs Available Separately</b>	NEMA 5-15P plug requires standard NEMA 5-15R receptacle (120V); Length: 2261 mm (89 in.), or NEMA 5-15P plug requires standard NEMA 5-15R receptacle (120V); Length: 3048 mm (120 in.), or NEMA 6-15P plug requires standard NEMA 6-15R receptacle (240V); Length: 2997 mm (118 in.) <i>Specify when ordering.</i>
<b>Certification/Agency Listing</b>	CE, cTÜVus
<b>Noise</b>	Advanced noise abatement, <45 dB(A) at 1 meter
<b>Indoor/Outdoor Use</b>	Indoor use only
<b>Environmental Conditions</b>	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
<b>Controller</b>	
<b>Controller Type</b>	Microprocessor controls
<b>Security</b>	Lockable lid
<b>Warm and Cold Alarms</b>	Setpoint ± 10°C
<b>Control Sensor</b>	One RTD (PT100 Class A)
<b>Dry Contacts</b>	Optional
<b>Internet Connectivity</b>	Optional SenseAnywhere wireless temperature monitoring and logging

## Refrigeration System

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

## Performance Data

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

## Dimensions and Construction

<b>Interior (L x W x D)</b>	332 x 221 x 340 mm   (13.1 x 8.7 x 13.4 in.)
<b>Exterior (L x W x D)</b>	692.5 x 350 x 460 mm   (27.3 x 13.8 x 18.1 in.)
<b>Net Weight, Empty</b>	21 kg (46 lbs.), nominal
<b>Shipping Dimensions (L x W x D)</b>	762 x 457 x 559 mm   (30 x 18 x 22 in.)
<b>Shipping Weight</b>	24 kg (53 lbs.)
<b>Insulation</b>	High performance vacuum insulated panels and polyurethane foam
<b>Gasket Heater</b>	User programmable duty cycle
<b>Options</b>	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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