

## 25 Litre Portable Ultra-Low Temperature (ULT) Freezer

**Product Code: STIRULT25NEU**

The ULT25NEU is the only truly portable ultra-low temperature (ULT) freezer available today for bringing cold chain sample and drug storage to patients and remote sites. It delivers safe and reliable ULT storage in the field and on the go, so you can:

- Safely preserve and deliver biologic drugs at the clinical point of patient care, anywhere in the world
- Collect temperature-sensitive samples and specimens at remote clinical trials

Temperature control and handling limitations of dry ice storage can risk the viability of your valuable samples in the field, while compressor-based ULT freezers are too unwieldy and unreliable for deployment at remote sites.



### Features

- 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  $-20^{\circ}\text{C}$  to  $-86^{\circ}\text{C}$
- 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

## Specifications

Technical Data	
Volume (Litres)	25
Operating Temperature (°C)	-20 to -86
External Dimensions; W x D x H (mm)	693 x 350 x 460
Internal Dimensions; W x D x H (mm)	332 x 221 x 340
Weight (Kg)	21
Insulation	High performance vacuum insulated panels and polyurethane foam
Compartments	18 x 2" Boxes
Noise (dBA)	< 45
Ambient Operating Temperature (°C)	+5 to +35
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
Defrost Method	Manual
Controller Type	Microprocessor controls
Security	Lockable door
Warm and Cold Alarms	Setpoint at $\pm 10^{\circ}\text{C}$
Control Sensor	One RTD (PT100 Class A)
Event Log	All alarms, door openings
Dry Contacts	Optional
Temperature Log	30 days available graphically
Internet Connectivity	Optional "SenseAnywhere wireless temperate monitoring and logging"
Steady State Energy Use	< 2.8 kWh/day at -80°C
Pull-Down from 25°C Ambient	4 hours at -80°C (Empty Cabinet)
Recovery from Door Opening	20 minutes to -80°C
Warm-up Profile	30 minutes to -60°C at -80°C (Empty Cabinet) 70 minutes to -40°C at -80°C (Empty Cabinet)
Heat Dissipation	403 BTU/h (load to HVAC) at -80°C (Empty Cab
Electric Power	100V-240VAC at 50/60Hz or 12V DC from mobile source
Maximum Power (Current)	280 watts (2 amps @240VAC, 15 amps @ 12V DC)

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