

BL-UDF-800 -86 °C Ultra Low Temperature Freezer



- ✓ TARGETED REFRIGERATION
- ✓ Fast Refrigeration
- ✓ Energy-saving & Environmentally Friendly
- ✓ Super-stable Cooling System
- ✓ Advanced thermal insulation
- ✓ Multi-layer sealing design
- ✓ Graphical curve for historical temperature data
- ✓ Removable heat exchanger

Temperature Control Technology

Upright Ultra-low Temperature Freezer

- Two-compressor cascade refrigeration system.
- Temperature maintenance: -40°C~-86°C with 0.1°C accuracy.
- Working ambient temperature: 10°C~32°C.
- Accurate Temperature Control Technology
- System can achieve optimum temp. (-70°C) in less than 60 min during storage of the samples at full capacity

Security and Access Control

- RFID access for electronic door opening.
- Keyboard lock, password protection (200 user IDs).
- Built-in backup battery for 72-hour operation without AC power.

Storage Capacity

- Minimum 800 liters capacity.
- Loading capacity of minimum 60,000 samples (2ml)

Construction and Materials

- Rust-free construction (interior and exterior).
- Inner material: Stainless steel 304.
- Shelves: Adjustable, stainless steel 304.

Alarms and Monitoring

- Visual and audible alarms for various conditions.
- Power failure protection and delay.
- Test holes for CO₂/LN₂ and external monitoring.
- The universal casters and leveling feet design are more convenient for movement and fixation.

Security and Access Control

- Digital control panel at eye level.
- 7 inches LCD touch screen with multiple display features.
- Eco Mode & High-Performance Mode.

Technical Specifications

- Compressors: Minimum 2 cascading compressors (1 HP each).
- Refrigerant: HC refrigerant.
- Noise level: ≤ 53 decibels.
- Certification: CE and ISO certification or equivalent.
- Wide voltage range: 187V~242V.

Warranty and Documentation

- 3-year warranty.
- Compressor warranty: 3 years.
- Supplied with 5 KVA online UPS.
- Requires 5 relevant order copies from renowned Government institutes.

Size and Dimensions

- Internal Size: 1300 x 850 x 1650 mm (WDH).
- External Size: Less than 1600 x 1260 x 2300 mm (WDH).

Additional Features and Accessories

- Manual defrost system.
- A4 paper slot, hand-written art-board.
- RS485 port for data communication.
- Castors for easy moving and fixation.
- Removable condenser front cover.
- Test hole for temperature monitoring systems.



Specifications

Basic	
Cooling type	Direct Cooling
Defrost	Manual
Temperature range	-40°C~-86°C
Ambient temperature	10~32°C
Display	7" LCD touch screen
Access port QTY/Dia.	1/25mm
USB Access	Y
Remote alarm Access	RS232/485
Outside material	Color sprayed steel
Inside material	SUS304
Castor	Universal
Refrigeration System	
Refrigerant	HC (R290&R170)
Temp. controller	Microprocessor
System	Cascade system
Sensor	PTC
Compressor brand/QTY	SECOP/2
Capacity(L/cu.ft)	800/28.25
Insulation	PURF+VIP
Inner door material/QTY	Foamed SUS304/2
Racks	18(5x4)+6(6x4)
Boxes (2 Inches)	504
Samples(2ml)	50,400
Alarms	
High/low temperature	Y
Power failure	Y
Abnormal voltage	Y
Sensor error	Y
Door ajar	Y
Filter screen check	Y
Thermostat failure	Y
Low battery	Y
Condenser clean	Y
High ambient temperature	Y
Door ajar	Y
Power failure backup (alarm)	72h
Electrical Data	
Voltage frequency(V/Hz)	187V~242V 50Hz/60Hz
Power(W)	710W
Current(A)	8.48A
Power consumption	14.98kWh/24h
Noise(db)	53
Dimensions	
Exterior size(W*D*H) (mm)	1600 x 1260 x 2300 mm
Interior size(W*D*H) (mm)	1300 x 850 x 1650 mm
Shipping CBM	2.8
N.W/G. W(kg)	300/370