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**Product Name :**  
Ultra-low Temperature Freezer

**Product Code :**  
LBNY-0001-800005



**Description :**

Ultra-low Temperature Freezer

**Technical Specification :**

Ultra-low Temperature Freezer -86 °C

Ultra-low Temperature Freezer

Freezers have two independent refrigeration systems to provide the highest levels of sample security.

Dual Cooling System for a backup system to ensure the integrity of samples is not put at risk and cabinet design with enhanced insulation performance and storage capacity.

If one refrigeration system fails, the other refrigeration system activate to maintain a temperature of up to - 70°C.

The Dual Cooling System is designated to securely store valuable biological samples.

It is consist of two individual compressors to provide a reliable -86°C Ultra-Low temperature environment.

Dimensions

External dimensions (W x D x H ): 670 x 882 x 1840 mm

Internal dimensions (W x D x H ): 490x600x1230 mm

Volume: 360-400 Liter

Capacity (2 "" boxes):Usable storage capacity of 2 inches boxes when the original 3 trays installed

Performance

Cooling performance (Air temperature measured at freezer center, ambient temperature 30 degree Celsius, no load): (-86 degree Celsius)

Temperature setting range: (-90 to -50 degree Celsius)

Temperature control range(Air temperature measured at freezer center, ambient temperature 30 degree Celsius, no load): (-86 to -50 degree Celsius)

#### Control

Controller: Microprocessor, non-volatile memory

Display: LCD touch panel

Temperature sensor: Pt-1000 (platinum resistance 1000 ohms)

#### Refrigeration

Refrigeration system: Independent dual-cooling

Compressor: 2x245 w

Refrigerant: HFC Mixed(hydro fluorocarbons mixed)

Insulation material: Combination of multiple high-performance vacuum panels with high-density foam insulation

Insulation material thickness: 80mm

#### Construction

Exterior material: Painted Steel

Interior material: Painted Steel

Outdoor (quantity) 1

Outdoor lock: yes

Inner door (quantity): 2 pieces

Shelves: 3 Quantity of stainless steel 5kg

Load per shelf: 50-60kg

Load per total (load allowed for chamber interior-total shelves(3)and chamber bottom, excluding load on casters monitored on product): 36

Vacuum release port: 2(1 automatic, 1 manual)

Access port: quantity : 3

Access port position: 3 locations(rear x 1,bottom x 2)

Access port diameter: 17mm

Casters: 4 quantity ( 2 leveling feet)

#### Alarms

Power failure: Visual Alarm, Buzzer Alarm & Remote Alarm

High temperature: Visual Alarm, Buzzer Alarm & Remote Alarm

Low temperature: Visual Alarm, Buzzer Alarm & Remote Alarm

Filter: Filter less design

Door open: Visual Alarm and Buzzer Alarm

Noise level: 48-52 dB (Nominal value- background noise 20dB[A])

Dual Cooling System with enhanced insulation performance and storage capacity

#### Required accessories

Liquid CO2 backup (Quantity one)

Upright freezer inventory racks for 2"" boxes

Temperature recorder

Continuous strip type-chart

Communication system

Digital interface (RS232C/RS485)for data acquisition system

Ethernet interface(LAN) for data acquisition system

Temperature: 5 ... 50 °C

Relative humidity: 5 ... 80% (non-condensing)

Altitude: Up to 3000 m above sea level

Electrical 220 ±10 ACV, 50 Hz



**Laboratory Instrument India**

