-86°C Ultra Low Temperature Freezer
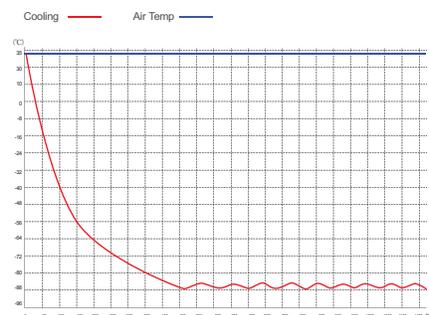
Compact and Convenience

Venchal Scientific 860 series Ultra Low Deep Freezers are idle choice for effective sample storage.

- High Precision Microprocessor Temperature Controller
- Targeted & Fast Refrigeration
- Energy-saving & Environmentally Friendly
- 2" LED Digital Display
- VIP Plus Vacuum Insulation
- Alarm & Security System

Performance Data :

Ultra Low Deep Freezer is specially designed to meet the demands for long-term and safe storage of the high-valued medical and laboratory materials. The 860 Series is cost effective Ultra Low Deep Freezer is equipped with high precision Microprocessor temperature controller comes with 2 inches LED Digital display, giving you more user-friendly and convenient interface ensure the integrity of the samples through precise temperature control can set the temperature uniformity inside the cabinet with a adjustable range from -40°C to -86°C with an uniform accuracy of ±1°C. Each cabinet comes with individual inner doors can be opened independently. The optimized foaming insulation inside the doors provides better temperature performance. The targeted refrigeration of the deep freezer enables fast refrigeration. It is designed in human-oriented with energy saving and environmentally friendly.

High Precision Temperature Control System

- The High Precision Microprocessor temperature control system and platinum resistor temperature sensors can realize more precise temperature control and enable users to set temperature inside the cabinet with a controllable range from -40°C to -86°C ensure the controlling precision ±1°C.
- The Large & Bright 2" LED digital temperature display, user-friendly interface and more accurate temperature control, which can indicate operating status clearly, temperature display simultaneously display the chamber temperature, Power Supply, Voltage, Ambient Temperature, Alarm and other parameters, etc,. The running status is clearly displayed and can be seen from distance.

Security & Alarm System

- It has a Multiple Audible & Visible Alarm functions, such as High / Low Temperature Alarm, Sensor Failure Alarm, Door Ajar Alarm, High Ambient Temperature Alarm, System Failure Alarm, Power Failure Alarm, Low Battery Alarm, Communication Failure Alarm, Samples out of date notification, Condenser cooling failure, etc,.
- USB data storage function: can store relevant operating data, which can be downloaded and checked, ensuring improved security and reliability of sample storage.
- The turn-on delay and stopping interval protection can ensure reliable operation.
- The Lockable door, Keyboard Lock and Password protection prevents any unauthorized access and operation without permission.

Effective Thermal Insulation System

- The Ultra Low temperature freezer is equipped with VIP+ vacuum insulation foaming door with seal.
  The two layer insulated foam door with double seal and the outdoor insulation design with multiple patents can prevent loss of cooling effectively and to improve temperature stability.
- The six sides of the cabinet are made from high-performance vacuum insulation materials, which can perfectly improve the thermal insulation performance.
- Individual inner door can be opened independently to minimize frost buildup and prevent loss of cooling inside the chamber.

Energy Saving

Powerful Refrigeration System

- Ultra Low deep freezer is adopted high-efficiency hermetically sealed compressor and famous EMB fan, which are energy saving and environmentally friendly.
- CFC / HCFC / HFC Free refrigerants
- The large finned condenser with a space between fins $\leq$ 2mm provides effective heat dissipation.
- Specialized refrigeration system design using whisper quiet fan and compressor $\leq$ 55dB

Ergonomic Design

- The interior are made of SS304 and Exterior is painted steel board low temperature resistance, anti-corrosion for long Service life and easy cleaning.
- The door with new type assisting rotating door handle and vacuum release port let the freezer be operated singlehanded to open and close the door easily.
- The two door design including the inner door and outer door can lock the cool air inside the chamber and ensures thermal insulation double silicon gasket seal for a long period.
- Equipped with temperature printer, record 7days data. 72 hour battery back up for printer and controller display.
- 4 Universal Caster wheels, easy for movement.
- Optional : Chart Recorder, Printer, Rs485, RS232, Co2 Backup System, Storage Racks & Boxes, Remote Alarm system.

Technical Specifications :

	Model No.	860-340
Technical Data	Cabinet Type	Upright
	Capacity (L)	340
	Climate Class	N
	Cooling Type	Direct cooling
	Defrost Mode	Manual
	Compressor	High Effiency Danfoss Compressor 1no
	Refrigerant	CFC / HCFC / HFC - Free refrigerant
	Evaporator	Coil Evaporator
	Fan Motor	EBM
	Noise(dB(A)	≤ 55
Performance	Cooling Performance (°C)	-86°C
	Temperature Range (°C)	-40°C ~ -86°C
	Ambient Temperature (°C)	16°C ~ 32°C
Control	Controller	Microprocessor Temperature Controller
	Display	2" Digital LED Display
Function	USB Interface	YES
	Access Test Port	1 no's φ25mm
	Alarm	Audible & Visible : High / Low Temperature, Sensor Failure, Door Ajar, System Failure, Main Board Communication Failure, High Ambient Temperature, Condenser Cooling Failure, Low Battery, Power Failure, Built in data logger USB Failure, Samples out of date, etc,.
Construction	External	High Quality Steel Plates with Powder Coating
	Internal	304 grade Stainless Steel
	External Door	Single
	Inner Door	4 Individual Inner Doors
	Shelves	3 shelf made of SS304, 4 Cabinet
	Door Lock with Keys	YES
	Vacuum Release Port	YES
	Insulation Thickness	VIP Plus vacuum insulation110 mm
	Data Logging/Time/Quantity	USB/Record every 10 minute / 2 Years
	Battery backup	YES
	Caster	4 units of Universal Caster wheels
	Foot	2 Leveling Foot
Electrical Data	Power Supply (V/Hz)	220 V ~ 240 V / 50Hz
	Input Power (W)	1147
	Rated Current (A)	5.32
Dimensions	Internal Dimension (WxDxH)	470x578x1250 mm
	External Dimension (WxDxH)	755x895x1982 mm
	Packing Dimension (WxDxH)	1003x895x2186 mm
	Net Wt. / Gross Wt.	208 kgs / 227 kgs
Accessories	Optional	Chart Recorder, CO2 Backup System, LN2 Backup System, Remote Alarm System, RS485, RS232, Printer
Others	Certificate	CE, ISO9001 :2015