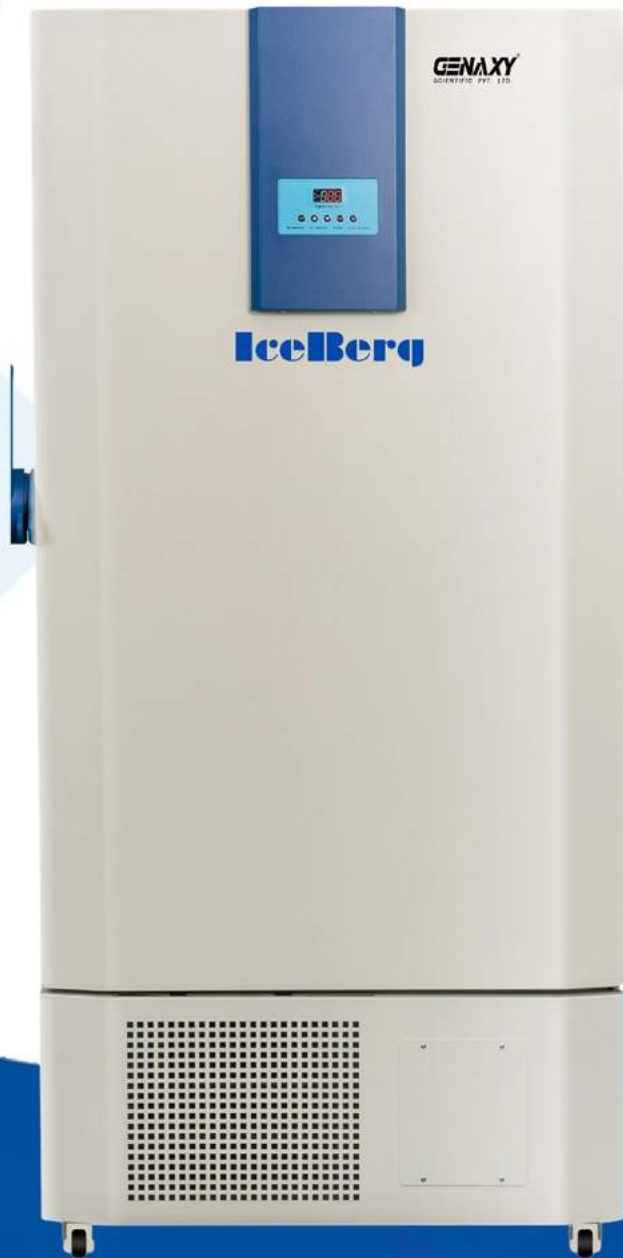


**GENAXY®**  
Customer Satisfaction Through Business Ethics



**GENAXY IceBerg series**  
Ultra-low Temperature Freezer Upright

# GENAXY IceBerg series

Ultra-low Temperature Laboratory Deep Freezer

## KEEP IT CHILL, ORGANIZED & SAFE WITH IceBerg.

The importance of ultra-low temperature freezers in scientific research cannot be overstated. These specialized freezing units, capable of reaching temperatures as low as  $-86^{\circ}\text{C}$  ( $-123^{\circ}\text{F}$ ), play a critical role in preserving a wide range of biological and medical samples. They are a critical choice when it comes to preservation of biological samples, vaccine storage, bio-banking and biomedical studies, drug discovery, cryopreservation of stem cells, genomic research and sequencing, clinical research, protection against sample contamination & long-term data reproducibility.

Maintaining a consistent temperature of  $-86$  degrees Celsius ( $-123$  degrees Fahrenheit) in ultra-low temperature freezers is crucial for preserving the integrity of stored samples. Several factors contribute to the successful maintenance of this temperature:

"It is essential to access freezer samples swiftly to minimize temperature fluctuations. However, finding the right sample often takes time, allowing warm air to affect frozen samples. The IceBerg series ULT freezers are equipped with efficient dual compressors, ensuring rapid recovery and returning temperatures to  $-86^{\circ}\text{C}$  promptly. This feature safeguards samples effectively during access, providing reliable protection.

Accommodation capacity for up to 50,000 tubes of (1.5 mL) for your daily sample storage, combined with excellent pull-down and recovery times

CFC-Free complete polyurethane foaming insulation, hydrocarbon refrigerant.

Different racks are available for organized freezers.



## Application:

-86°C ULT Freezer is specially designed for long term storage of various biological products, such as germs, virus, erythrocytes, leukocytes, cutis. It can be installed in institutions including blood banks, hospitals, epidemic prevention services, research institutes and laboratories for electronic and chemical plants, biological engineering institutes and marine fishery companies.

Here are a variety of ultra-low temperature storage solutions for individual laboratory users to choose from to meet the growing demand for sample storage.

## Temperature Control

- Microprocessor control, Large LED display inner temperature clearly, and with easy view.
- The inner temperature can be adjustable at the range of -40°C~-86°C, with an increment of 0.1°C.
- Lock and password for protection to prevent arbitrary adjustment of operating parameters.
- Optional 7"color LCD touch screen display system.

## Safety Control

Malfunction alarms: high temperature alarm, low temperature alarm, Sensor failure, Power failure alarm, low voltage of backup battery, Over temperature alarm system, set the alarm temperature as requirements.

Three alarming methods: buzzer alarming, digital flashing alarming and Remote alarm;

Protection function: power-on delay, time between stops.

## Refrigeration System

Optimized cascade refrigeration technology, SECOP compressor to reach a high refrigeration effect;

Specially designed Heat Exchanger, high efficient heat transfer, energy conservation;

V.I.P insulation panels to ensure the insulation performance.

CFC-Free overall polyurethane foaming insulation;

High efficient hydrocarbon refrigerant.

## Ergonomic Design

- Safety door lock, preventing unauthorized access;
- Wide voltage design from 192V to 242V;
- Double inner doors to reduce the loss of cold air after opening the door;
- Suitable for 2" and 3" international standard freezer boxes.
- Pressure-balanced port design, easy to open the door.
- Heavy type caster and locking with adjustable screw, easy to move and fix;
- Ultra-simple condenser filters design, convenient for maintenance and washing.

## Technical Specification:

Model		ULT 280L	ULT 360L	ULT 480L	ULT 590L	ULT 730L
Technical Data	Cabinet Type	Vertical	Vertical	Vertical	Vertical	Vertical
	Climate Class	N	N	N	N	N
	Cooling Type	Direct cooling	Direct cooling	Direct cooling	Direct cooling	Direct cooling
	Defrost Mode	Manual	Manual	Manual	Manual	Manual
	Refrigerant	Hydrocarbon, Mixing	Hydrocarbon, Mixing	Hydrocarbon, Mixing	Hydrocarbon, Mixing	Hydrocarbon, Mixing
Performance	Cooling performance(°C)	-80	-80	-80	-80	-80
	Temperature Range(°C)	-40~-86	-40~-86	-40~-86	-40~-86	-50~-86
Material	Exterior Material	Galvanized steel powder coating				
	Interior Material	Galvanized steel powder coating				
	Insulation Material	PUF+VIP				
Dimensions	Capacity(L)	280L	360L	480L	590L	730L
	Interior Dimensions(W*D*H)	460x470x1310mm	460x600x1310mm		740x600x1310mm	740x730x1310mm
	Exterior Dimensions(W*D*H)	640x692X1970mm	640x822X1970mm		920x822X1920mm	920x952X1970mm
	Packing Dimensions(W*D*H)	760×770×2050 (mm)	760×900×2050 (mm)		1050×900×2050 (mm)	1050×1040×2050 (mm)
	Thickness of Cabinet Foamed Layer	90mm				
	Thickness of Door	90mm				
Capacity for 2 inch boxes		180	240	320	400	480
Inner door		2	2	2	2	2
Power Supply(V/Hz)		220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz

Controller Functions	Display	Large digital display & adjusting keys				
	High/Low Temperature	Y	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y	Y
	High Ambient Temp	Y	Y	Y	Y	Y
	Alarm mode	Sound and light alarm, remote alarm terminal				
Accessories	Caster	Y	Y	Y	Y	Y
	Test Hole	Y	Y	Y	Y	Y
	Shelves (stainless steel)	—	3	3	3	3
	Chart Temperature Recorder	Optional	Optional	Optional	Optional	Optional
	Door locking device	Y	Y	Y	Y	Y
	Handle	Y	Y	Y	Y	Y
	Pressure balance hole	Y	Y	Y	Y	Y
	Racks & Boxes	Optional	Optional	Optional	Optional	Optional

### Optional Accessories:

Freezer Model	Model for Racks	Racks Specification	Dimension (W*D*H)mm	Qty of racks in one freezer	Qty of 2" boxes in one freezer
<b>ULT 100L</b>	R253A	2 inch, stainless steel, Latera type; 5*3, can store 15 units boxes (2 inch)	138*409*287	4	60
	R253B	2 inch, stainless steel, drawer type; 5*3, can store 15units boxes (2 inch)	140*419*289	4	60
<b>ULT 280L</b>	R253A	2 inch, stainless steel, Latera type; 5*3, can store 15 units boxes (2 inch)	138*409*287	12	180
	R253B	2 inch, stainless steel, drawer type; 5*3, can store 15units boxes (2 inch)	140*419*289	12	180
<b>ULT 360L</b>	R254A	2 inch, stainless steel, Latera type; 5*4, can store 20 units boxes (2 inch)	138*544*287	12	240
	R254B	2 inch, stainless steel, drawer type; 5*4, can store 20 units boxes (2 inch)	140*544*289	12	240
<b>ULT 480L</b>	R254A	2 inch, stainless steel, Latera type; 5*4, can store 20 units boxes (2 inch)	138*544*287	16	320
	R254B	2 inch, stainless steel, drawer type; 5*4, can store 20 units boxes (2 inch)	140*544*289	16	320
<b>ULT 590L</b>	R254A	2 inch, stainless steel, Latera type; 5*4, can store 20 units boxes (2 inch)	138*544*287	20	400
	R254B	2 inch, stainless steel, drawer type; 5*4, can store 20 units boxes (2 inch)	140*544*289	20	400
<b>ULT 730L</b>	R255A	2 inch, stainless steel, Latera type; 5*5, can store 25 units boxes (2 inch)	138*680*287	20	500
	R255B	2 inch, stainless steel, drawer type; 5*5, can store 25 units boxes (2 inch)	140*688*289	20	500

### Corporate Office:

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