

# TwinCool Frequency Conversion ULT Freezer



**DW-86L828ST**

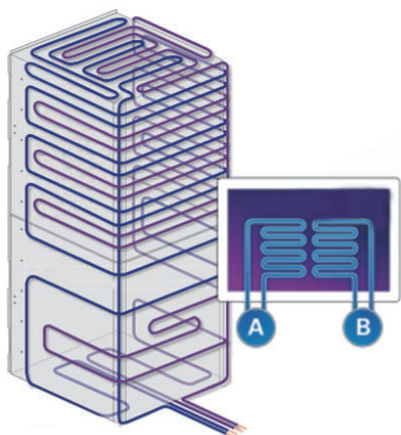
## Scope of Application:

Suitable for the storage of biological samples such as viruses, blood cells, bacteria and tissue, as well as electronics and other special materials. The freezer combines frequency conversion compressors, hydrocarbon refrigerants (HC) and dual refrigeration system technology to deliver optimal sample security, energy-efficiency, and sustainability. The product is used within hospitals, disease control, life science and medical research, bioengineering, pharma and other enterprise laboratories.

## Innovative Design

- Energy saving and environmentally friendly
- HC refrigerant
- Intelligent control
- Combines frequency conversion technology with dual refrigeration
- Superior insulation performance

## Product Advantages



### Dual refrigeration system, double safety and optimal reliability

Double independent hydrocarbon refrigeration system design, each system can maintain  $-80^{\circ}\text{C}$  ensuring the safety of stored samples



### World-leading Energy Saving Refrigeration Technology

Intelligent frequency conversion technology and HC refrigeration system delivers a 50% reduction in energy usage when compared to traditional HFC refrigeration systems



### Environmental Protection

Environmentally friendly hydrocarbon refrigerant and foam material LBA



### Optional IoT System

The optional IoT monitors the operating status of the equipment in real time. Equipped with multiple alarm functions and a self-diagnostics system to identify and warns users to ensure sample safety

## Ergonomic Design



### Low Noise Design

Optimised systems and noise-reducing cabinet design lower noise out to 53dB for a quieter working experience



### Adjustable Sample Loading Tray (Optional)

The adjustable height sample load tray provides users with a convenient place to hold samples while opening and accessing storage compartments



### Large loading capacity

Maximum Capacity: 600 boxes (2 inch boxes with 10\*10 configuration)  
60,000 samples can be stored



### Intelligent Control

10.1-inch high-performance touch screen, sensitive touch operation. Users can check the real-time operating status via IoT

# TwinCool Frequency Conversion ULT Freezer

## Product Parts



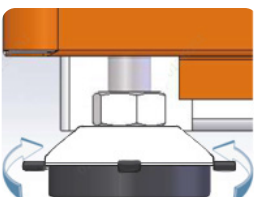
### Ergonomic design

Document holder for easy storage of documents



### High quality door opening experience

The ergonomic chamfer design of the handle ensures smooth operation and maximum durability



### Adjustable feet

For easy positioning and levelling

### Magnetic filter screen

Filter screen is easy to clean



DW-86L828ST

### Microcomputer control

Microcontroller with 10.1 inch LCD touch screen displays temperature and other important data. Temperature display precision is 0.1°C

### Multiple alarms

Including high/ low temperature alarm, sensor error alarm, hot condensor alarm, power failure alarm, low battery alarm, door ajar alarm, high ambient temperature alarm, etc



### Multiple safety lock

Standard mechanical lock, optional electromagnetic lock  
Optional fingerprint lock and NFC for optimal security and access



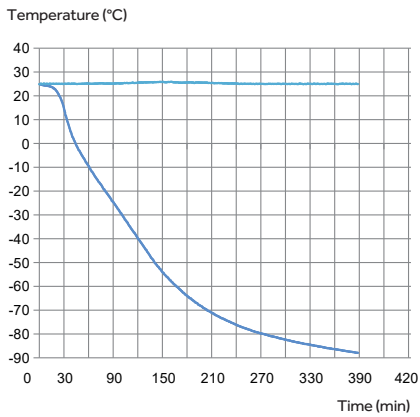
### Networking function

Equipped with RS485 interface to connect multiple freezers

## Temperature Curve

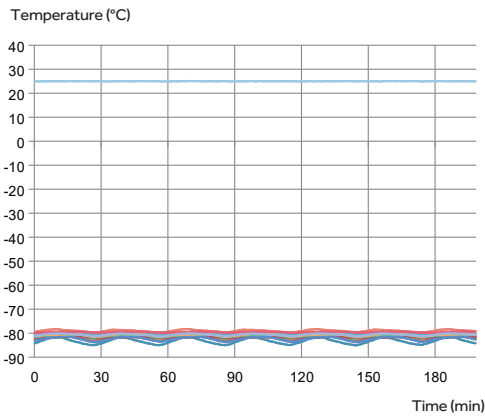


### Temperature Cool Down Curve



— 3<sup>rd</sup> centre  
— amb temp

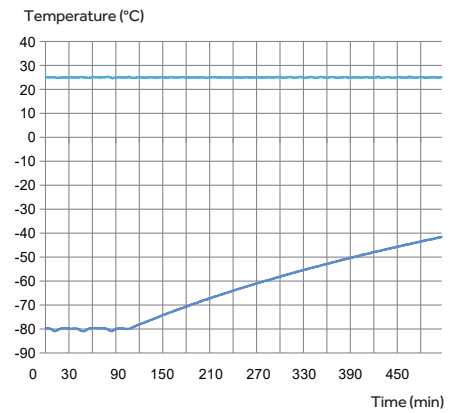
### Stability Curve



— ave temp  
— 1<sup>st</sup> center temp  
— 2<sup>nd</sup> left outer temp  
— 2<sup>nd</sup> right inner temp  
— 3<sup>rd</sup> center temp

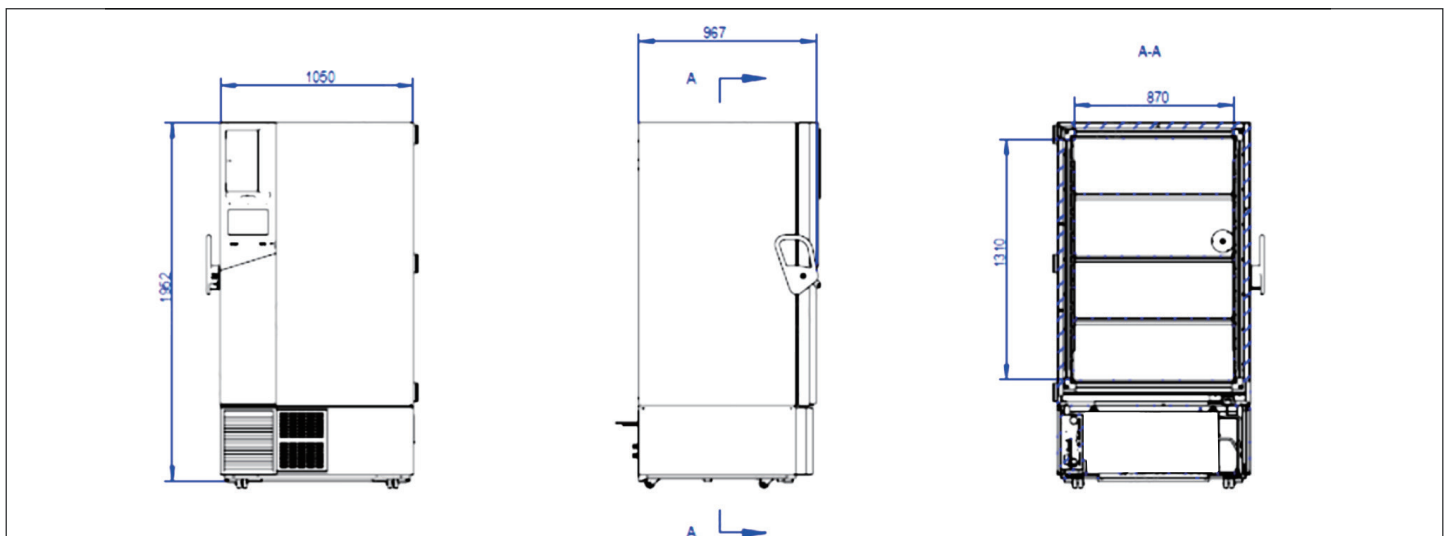
— 1<sup>st</sup> left inner temp  
— 1<sup>st</sup> right outer temp  
— 2<sup>nd</sup> center temp  
— 3<sup>rd</sup> left inner temp  
— 3<sup>rd</sup> right outer temp

### Temperature Recovery Curve



— 3<sup>rd</sup> centre  
— amb temp

## Product Dimensions



# TwinCool Frequency Conversion ULT Freezer

## Specifications



Model		DW-86L828ST	
Technical Data	Cabinet Type	Upright	
	Climate Class	N	
	Cooling Type	Direct cooling	
	Defrost Mode	Manual	
	Refrigerant	HC	
	Sound Level (dB(A))	53	
Performance	Cooling Performance (°C)	-86	
	Temperature Range (°C)	-40~-86	
Control	Controller	Microprocessor	
	Display	LCD	
Electrical Data	Power Supply (V/Hz)	220~240/50/60	
	Power (W)	1400	
	Electrical Current (A)	6.5	
Dimensions	Capacity (L/Cu.Ft)	828/29.2	
	Net/Gross Weight	kg	380/410
		lbs	837.7/914.9
	Interior Dimensions (W*D*H)	mm	870*716*1310
		in	34.3*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	1145*998*1980
		in	45.1*39.3*78.0
	Packing Dimensions (W*D*H)	mm	1190*1045*2150
		in	46.9*41.1*84.6
Cabinet Width (without handle and hinge)	mm	1050	
Container Load (20'/40'/40'H)		8/20/20	
Functions	High/Low Temperature	Y	
	Hot Condenser	Y	
	Power Failure	Y	
	High/Low Voltage	Y	
	Sensor Error	Y	
	Low Battery	Y	
	High Ambient Temperature	Y	
	Door Ajar	Y	
Accessories	Caster	Y	
	Foot	Y	
	Porthole	Y/2	
	Shelves/ Inner Doors	3/4	
	USB Interface	Y	
	Remote Alarm	Y	
	5V Power Supply Port	Y	
	Temperature Chart Recorder	Optional	
	RS232/485 Port	NA/Standard	
	NFC	Optional	
	Fingerprint	Optional	
	IoT module	Optional	
	CO <sub>2</sub> Backup System	Optional	
	LN <sub>2</sub> Backup System	Optional	
	Freezing Rack; DCJ-55-A or DCJ-55-B; (Quantity)	24	
Others	Certification	CE	

\*Haier Biomedical reserves the right to change products and specifications without prior notice.



# WolfLabs

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