



Safe, Secure and Reliable



Environmentally Friendly



High Performance in  
Temperature Uniformity



World-leading Energy Saving  
Refrigeration Technology

# TwinCool Frequency Conversion ULT

The Twincool Frequency conversion range of freezers utilize two key innovations to delivery outstanding sample security and energy efficiency – dual cooling and adaptive refrigeration technologies.



**Haier Biomedical & Laboratory Solutions America LLC**

Website: [www.haiermedical-usa.com](http://www.haiermedical-usa.com)



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## Product Advantages



### Safe, Secure and Reliable

Multiple alarms, including high and low temperature, power failure, door ajar, hot condenser, low battery, sensor error, and high ambient temperature.

The standard ambient temperature ranges from 10 to 32°C and can be applied to the ambient temperature of 38°C for an extended period of time.



### Environmentally Friendly

HC refrigerants have zero Global Warming Potential (GWP) and the LBA polyurethane foam has lower GWP than most HFC commonly used, combined they deliver a superior environmental protection.



### High Performance in Temperature Uniformity

The unique frequency conversion refrigeration system ensures excellent temperature stability.



### World-leading Energy Saving Refrigeration Technology

High efficiency cooling fans and compressors, combined with hydrocarbon refrigerants, ensure energy savings and long-term sample security.



### Dual Refrigeration System Double Safety and Optimal Reliability

Double independent hydrocarbon refrigeration system design, each system can maintain -80°C ensuring the safety of stored samples.

## Ergonomic Design

- ▶ Leveling Feet and Casters
- ▶ Adjustable Shelves
- ▶ Document Holder
- ▶ Easy to Remove Filter Cover
- ▶ Heated Pressure Equalization Port

### ▶ Intelligent Control

10.1-inch high-performance touch screen, sensitive touch operation. Users can view operating status, and historical temperature data and alarm events. With the optional IoT module users can check the status and alerts in real-time.

### ▶ Minimal Sound Level Output

Noise-reducing design, with ultra silent compressor technology and an energy-saving fan, offers considerably lower noise levels.



**DW-86L578BPST**

**Specifications**

	Model	DW-86L828BPST	DW-86L728BPST	DW-86L578BPST	
Technical Data	Defrost Mode	Manual	Manual	Manual	
	Refrigerant	HC	HC	HC	
	Sound Level (dB(A))	42	42	42	
	Cooling Performance (°C)	-86	-86	-86	
Performance	Temperature Range (°C)	-40~-86	-40~-86	-40~-86	
	Controller	Microprocessor	Microprocessor	Microprocessor	
	Temperature Uniformity (°C)	±3	±3	±3	
Control	Display	LCD	LCD	LCD	
	Power Supply (V/Hz)	100-230/50/60Hz	100-230/50/60Hz	100-230/50/60Hz	
Electrical Data	Power (W)	720	710	710	
	Max Power Draw (W)	1400	1100	1100	
	Electrical Current (A)	13	10.4	10.4	
	Power Consumption (kWh/24h) (set -80°C at 25°C ambient)	10.4	8.4	7.0	
	Capacity (L/Cu.Ft)	29.2 cu ft (828L)	25.7cu ft (728L)	20.4cu ft (578L)	
Dimensions	Net/Gross Weight	lbs	837.7/914.9	771.6/848.8	716.5/782.6
	Actual/Packaged Weight	kg	380/410	350/385	325/355
	Interior Dimension (W*D*H)	in	34.3*28.2*51.6	30.2*28.2*51.6	24.4*28.2*51.6
	Exterior Dimension (W*D*H)	in	45.1*39.3*78.0	41.2*39.3*78.0	35.2*39.3*78.0
	Packing Dimension (W*D*H)	in	46.9*41.1*84.6	43.3*43.5*84.6	37.4*41.5*84.6
	Cabinet Width (without handle and hinge)	mm	1050	946	800
Alarm Functions	High/Low Temperature	Y	Y	Y	
	Hot Condenser	Y	Y	Y	
	Power Failure	Y	Y	Y	
	High/Low Voltage	Y	Y	Y	
	Sensor Error	Y	Y	Y	
	Low Battery	Y	Y	Y	
	High Ambient Temperature	Y	Y	Y	
	Door Ajar	Y	Y	Y	
	Start-up Delay	Y	Y	Y	
	Caster	Y	Y	Y	
	Foot	Y	Y	Y	
Accessories	Porthole	Y/2	Y/2	Y/2	
	Shelves/ Inner Doors	3/4	3/4	3/4	
	USB Interface	Y	Y	Y	
	Remote Alarm	Y	Y	Y	
	5V Power Supply Port	Y	Y	Y	
	Temperature Chart Recorder	Optional	Optional	Optional	
	RS232/485 Port	NA/Standard	NA/Standard	NA/Standard	
	CO <sub>2</sub> Backup System	Optional	Optional	Optional	
	LN <sub>2</sub> Backup System	Optional	Optional	Optional	
	CE	Y	Y	Y	
Certification	UL	Y	Y	Y	
	Energy Star	Y	Y	Y	