



Smart Frequency Conversion ULT Freezer



DW-86L579/729/829/959BPT

Scope of Application

Suitable for long term storage applications and compliant disease control and prevention centres, scientific research institutions, biomedical engineering institutes, the agriculture/fishery sector as well as the electronics and chemical industries.

Friendly Design

- Intelligent frequency conversion technology
 Low noise design
 Safe and secure
- Precise temperature control to ensure the cabinet temperature stability

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Smart Frequency Conversion ULT Freezer

Product Parts ()

Smart Full-size Touch Screen

10 inch capacitive touch screen, state-of-art UI design coupled with sample management system to provide the optimal user experience



Pressure Equalisation Port

Heated port with spring assisted mechanism to prevent icing on the vent allows users to reopen the main door soon after entering Adopts chromium plating, rust-proof



Energy Saving Refrigeration

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





Multilayered Sealing Structure

Multilayered gaskets decrease heat loss and guarantee excellent warm up times in the event of a power failure



USB Interface

Enables users to download historical temperature data for compliance/auditing purposes



Improved Handle Design

Lockable handle with unique key prevents other Haier Biomedical freezer owner's access to your precious samples, also comes with space for a padlock for that extra security

Advanced Hardware System





Smart Full-size Touch Screen

 $10\, \rm inch$ capacitive touch screen, state-of-art UI design coupled with sample management system to provide the optimal user experience.



HC & Variable Frequency Drive Refrigeration System for Additional Energy Saving

Advanced innovative design delivers superior energy savings. The energy consumption is down to a single digit.

Optional IoT Software System





Simplified Sample Management Experience

Optional barcode scanner for simple, effortless and precise identification. Input and retrieve your samples with higher precision and efficiency.



Wireless Monitoring Connectivity

Check the real-time operating status via mobile phones or portable tablet, simple and reliable.

A Quicker product access, identification and retrieval

Instead of a manual system, the one-gun, one-code and one-key operation plus touch screen synchronization means you can access and retrieve your samples within seconds.

B 24-hour sample protection

Using Haier Biomedical's app and IoT technology the unit can be monitored and can self-diagnose faults, ensuring you are always aware of your unit's status and able to make real-time and informed choices to protect your samples.

C Cloud data storage available

Store hundreds of millions of scientific research and sample information in the cloud server.

Friendly Design





Safe and Secure

Standard equipped with key lock, padlock and optional electromagnetic lock, fingerprint lock, providing multiple safeguards for sample safety.



Super Energy Efficient with Three Environmentally Friendly Innovations

Ultra-low power consumption, down to less than 10kWh/day, ensuring a world leading energy saving performance.



Low Noise

Special noise-reduction design plus super silent compressor technology and energy-saving fan, considerably lowers noise level.



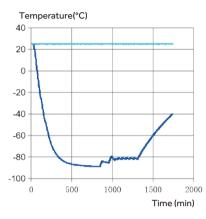
Optimized Insulation

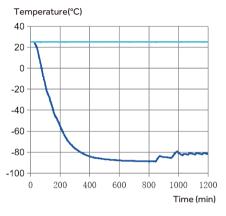
Double foaming for both inner and outer doors and five-layer sealing design and optimized super-thick VIP thermal insulation technology, extends temperature holdover time during power failure and increases insulation efficiency by 20%.

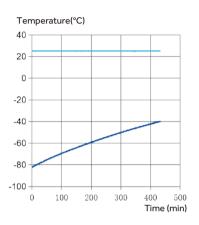
Smart Frequency Conversion ULT Freezer

Temperature Curve

DW-86L959BPT Typical Performance Characteristics







Comprehensive Curve

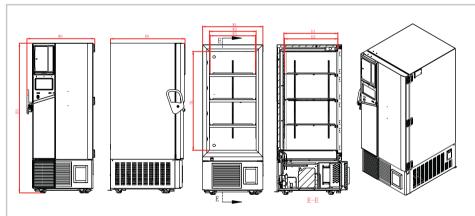
Temperature Cool Down Curve

Temperature Recover Curve



Product Dimensions





Parameter Description:

W0--Overall width of the machinew

W1--Outer width of the cabinetw

W2--Inner liner width

W3--Width of inner shelf

(Width of shelve for effective placement of freezing rack)

D0--Overall depth of the machine

D1-- Inner liner depth

D2-- Inner depth of shelf (Depth of shelve for effective placement of freezing rack)

H0--Overall height of the machine

H1--Inner liner height

Parameter Model	WO	W1	W2	W3	Н0	H1	D0	D1	D2
DW-86L579BPT	895mm	800mm	620mm	602mm	1980mm	1310mm	998mm	716mm	706mm
DW-86L729BPT	1046mm	946mm	766mm	750mm	1980mm	1310mm	998mm	716mm	706mm
DW-86L828BPT	1145mm	1050mm	870mm	854mm	1980mm	1310mm	998mm	716mm	706mm
DW-86L959BPT	1296mm	1196mm	1016mm	1000mm	1980mm	1310mm	998mm	716mm	706mm

Smart Frequency Conversion ULT Freezer

Specifications ()

	Model		DW-86L579BPT	DW-86L729BPT	DW-86	L829BPT	DW-86L	959BPT
	Cabinet Type		Upright	Upright	Upright		Upri	ight
Technical Data	Climate Class		N	N	N		N	
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling		Direct Cooling	
	Defrost Mode		Manual	Manual	Manual		Manual	
	Refrigerant		HC	HC	HC		HC	
	Sound Level (dB(A))		43.5	43.5	43.5		47	
D	Cooling Performance (°C)		-86	-86	-86		-86	
Performance	Temperature Range (°C)		-40~-86	-40~-86	-40~-86		-40~-86	
Control	Controller		Microprocessor	Microprocessor	Microprocessor		Microprocessor	
Control	Display		Touch Screen LCD	Touch Screen LCD	Touch Screen LCD		Touch Screen LCD	
Electrical Data	Power Supply (V/Hz)		100~230/50/60	100~230/50/60	110~120/60 208~230/50/60		110~120/60 208~230/50/60	
	Power (W)		1100	1100	1400		1750	
	Electrical Current (A)		14	14	15 6		20 9	
	Capacity (L/Cu.Ft)		579/20.4	729/25.7	829/29.2		959/33.9	
	Not/Cross Waight (approv)	kg	325/355	350/385	380/415		450/485	
	Net/Gross Weight (approx)	lbs	716.5/782.6	771.6/848.8	837.7/914.9		992.1/1069.2	
	1.1 D	mm	620*716*1310	766*716*1310	870*716*1310		1016*716*1310	
Dimensions	Interior Dimension (W*D*H)	in	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6		40.0*28	3.2*51.6
DIFFICISIONS	Exterior Dimension (W*D*H)		895*998*1980	1046*998*1980	1145*998*1980		1296*998*1980	
			35.2*39.3*78.0	41.2*39.3*78.0	45.1*39	9.3*78.0	51.0*39	51.0*39.3*78.0
	Packing Dimension (W*D*H) mm		950*1055*2150	1100*1105*2150	1190*10)45*2150	1365*1105*215	
			37.4*41.5*84.6	43.3*43.5*84.6	46.9*4	1.1*84.6	53.7*43.5*84.	
	Container load (20'/40'/40'H)		12/24/24	10/20/20	8/20/20		8/16/16	
	High/Low Temperature		Y	Y	Y		Y	
	Hot Condenser		Υ	Υ	Y		Y	
	Power Failure		Y	Y	Y		Y	
	High/Low Voltage		Y	Y	Y		Y	
Functions	Sensor Error		Y	Y	Υ		Y	
	Low Battery		Y	Y	Υ		Y	
	High Ambient Temperature		Υ	Y	Υ		Y	
	Door Ajar		Y	Y	Y		Y	
	Start-up Delay		Υ	Y	Υ		Y	
	Caster		Υ	Y	Υ		Y	
	Foot		Υ	Y	Y		Y	
Accessories	Porthole		Y/2	Y/2	Y/2		Y/2	
	Shelves/Inner Doors		3/4	3/4	3/4		3/4	
	USB Interface		Y	Y	Υ		Y	
	Remote Alarm		Υ	Y	Y		Y	
	5V Power Supply Port		Υ	Υ	Y		Y	
	Temperature Chart Recorder		Optional	Optional	Optional		Optional	
	RS485 Port		Y	Y	Y		Y	
	CO₂ Backup System		Optional	Optional	Opt	ional	Optional	
	LN₂ Backup System		Optional	Optional		ional	Optional	
	CE		Y	Y	/	Υ	/	Υ
Certifications	UL		Y	Y	/	Y	,	Υ
	ENERGY STAR		Y	Y	Y	Y	Y	Υ

 $\label{thm:linear} \mbox{Haier Biomedical reserves the right to change products and specifications without prior notice.}$