

Haier Biomedical



# Variable Frequency Drive -86°C ULT Freezer

IoT technology for more intelligent management  
HC & Inverter technology for better energy saving



Ihr Fachhändler:  
[www.axon-labortechnik.de](http://www.axon-labortechnik.de)

**Axon**  
Labortechnik

Axon Labortechnik GmbH  
Im Braumenstück 16 - D-67659 Kaiserslautern  
Verkaufsbüro Tel. 06223/95 41 190 Fax: 06223/95 40 714  
[info@axon-labortechnik.de](mailto:info@axon-labortechnik.de)

## Scope of Application ➤

It can be used for low-temperature tests and other tests which require strict storage condition for the viruses, pathogens, red blood cells, white blood cells, skin, bones, bacteria, semen, biological products, ocean products, electronic devices and special materials. Application could be found at blood stations, hospitals, disease control and prevention centers, scientific research institutions, enterprises in electronics and chemical industry, biomedical engineering institutes and pelagic fishery companies and etc.

## Advanced hardware system



### Smart full-size touch screen

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



### HC & variable frequency drive refrigeration system for additional energy saving

More advanced innovative design and excellent energy saving performance. Energy consumption is down to a single digit



### New robust and durable handle, optional finger print lock and NFC electromagnetic lock

New robust and durable handle and built-in lock with 4 keys  
More flexible configuration: optional finger print lock and NFC card access

## IoT software system



### Simplified sample management experience

Smart storage: scanning gun& barcode for precise identification, simple and effortless  
Precise delivery: retrieve your samples with higher precision and efficiency



### Interconnected multi terminals for monitoring safety

Check the real-time operating status via mobile phones or palmtop, simple and reliable

### A Shortening the access time from 1 minute to 1 second

Changing ransacking boxes and chests and manually recording to one-gun, one-code and one-key operation, realizing double screen synchronization and one-second access

### B Changing safety control from unknown to 24-hour controlled

Changing scattered equipment to all-time, all-weather, all-direction and multi-screen status monitoring and equipment self-diagnosis by IoT, protecting the sample safety

### C Three-times energy saving and environmental protection

Ultra-low power consumption, down to less than 10KWh/day, world leading energy saving performance

## Friendly design



### Equipped with a variety of safety locks, providing more safety guarantee

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



### Massive sample information storage available in the cloud

Hundreds of millions of scientific research and sample information being able to be stored into the cloud server



### Multiple noise reduction measures, lower noise level of 44dB

Special noise-reduction design, ultra silent inverter compressor and variable speed fan, enabling the surroundings to be as silent as possible



### Double foaming for both inner and outer doors and five-layer sealing design

Optimized super-thick V+P thermal insulation technology, extending temperature holdover time during power failure and increasing insulation efficiency by 20%

# Specification

	Model	DW-86L579BPT	DW-86L729BPT	DW-86L829BPT	DW-86L959BPT
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	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
	Noise((dB(A))	43.5	43.5	43.5	47
Performance	Cooling Performance(°C)	-86	-86	-86	-86
	Temp Range(°C)	-40~-86	-40~-86	-40~-86	-40~-86
Control	Controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display	LCD	LCD	LCD	LCD
Electrical Data	Power Supply(V/HZ)	100~230/50/60	100~230/50/60	208~230/50/60	208~230/50/60
	Power(W)	1100	1100	1100	1300
	Electrical Current(A)	6	6	6	7
Dimensions	Capacity(L/Cu.Ft)	579/20.4	729/25.7	829/29.2	959/33.9
	Net/Gross Weight	325/355	350/385	380/415	450/485
	(approx)	716.5/782.6	771.6/848.8	837.7/914.8	992.1/1069.2
	Interior Dimension	620*716*1310	766*716*1310	870*716*1310	1016*716*1310
	(W*D*H)	24.4*28.2*51.6	30.2*28.2*51.6	34.3*28.2*51.6	40.0*28.2*51.6
	Exterior Dimension	895*998*1980	1046*998*1980	1145*998*1980	1296*998*1980
	(W*D*H)	35.4*39.3*78.0	41.2*39.3*78.0	45.1*39.3*78.0	51.0*39.3*78.0
	Packing Dimension	950*1055*2150	1100*1105*2150	1190*1045*2150	1365*1105*2150
Functions	(W*D*H)	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6	53.7*43.5*84.6
	Container Load(20'/40'/40'H)	12/24/24	10/20/20	8/20/20	8/16/16
	Remote Alarm	Y	Y	Y	Y
	High/Low Temp	Y	Y	Y	Y
	Hot Condenser	Y	Y	Y	Y
	Power Failure	Y	Y	Y	Y
	Sensor Error	Y	Y	Y	Y
	Low Battery	Y	Y	Y	Y
Accessories	High Ambient Temp	Y	Y	Y	Y
	Door Ajar	Y	Y	Y	Y
	Caster	Y	Y	Y	Y
	Foot	Y	Y	Y	Y
	Test Hole	Y/2	Y/2	Y/2	Y/2
	Shelves/ Inner Doors	3/4	3/4	3/4	3/4
	USB Interface	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
Others	Temp Recorder	Optional	Optional	Optional	Optional
	485 Port	Standard	Standard	Standard	Standard
	CO2 Backup System	Optional	Optional	Optional	Optional
	LN2 Backup System	Optional	Optional	Optional	Optional
	Certificate	CE、UL	CE、UL	CE、UL	CE、UL