

Haier Biomedical
Intelligent Protection of Life Science

ULT Freezer



DW-86L419/579/729/829

Making Your Lab More Intelligent and Reliable

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Product Advantages

All-New Upgrade

Both the appearance and performance have been upgraded and optimized compared to the previous generation, delivering users an optimal experience

HC Energy-Saving

The high efficiency hydrocarbon compressor along with the upgraded refrigeration technology leads to a significant reduction in energy consumption



Superior Uniformity

The temperature uniformity is within $\pm 4^{\circ}\text{C}$ at -80°C setpoint, which ensures reliable preservation and maintains sample integrity over time

Environmental Protection

Adopt environmentally friendly hydrocarbon refrigerant and green LBA insulation to reduce the carbon footprint and protect the environment

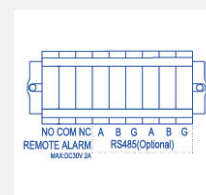
Multiple Alarm Functions

Including high/low temperature alarm, sensor failure alarm, power failure alarm, low battery alarm, door ajar alarm and high ambient temperature alarm. Alarm mode is sound and flash



Rich Configurations

Standard: RS485 interface, remote alarm, USB interface, 10-inch touch screen, adjustable stainless steel shelves
Optional: temperature recorder, backup system, stainless inner



Optimized Design



Upgraded VIP Insulation Technology

The Vacuum Insulated Panels (VIP) has been upgraded from a spliced form to an integrated one, ensuring unparalleled temperature performance



Improved Pressure Relief Port

The re-entry time has been shortened to just 60 seconds, effectively ensuring continuous access to the freezer



Intelligent Control

The 10 - inch LCD touchscreen integrated with a microprocessor controller system can intuitively display internal temperature, ambient temperature, set point and other data as well as temperature curves. The set temperature is adjustable between -40°C and -86°C, with a temperature display precision of 0.1°C



Safe and Secure

Equipped with keyed door lock, padlock, optional electronic lock, providing multiple safeguards for sample safety

Product Parts



Document holder for easy storage of files and pens



The handle designed with a unique sliding-track makes opening and closing the door easier



The tool-free removable filter makes it easy and quick to clean



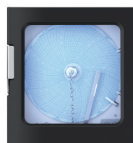
The outer door is equipped with four layers of seals and the inner door with one layer, which significantly reduces heat loss



Standard USB interface enables users to download historical temperature data (up to 15 years)



4 swivel casters and 2 adjustable leveling legs for easy maneuvering and precise positioning



- Front-mounted
- For independent temperature monitoring

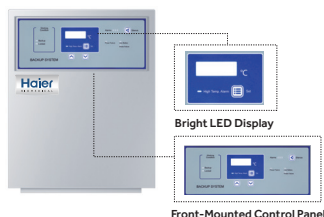


Advantage

- Small footprint, light and easy for installation
- User adjustable temperature setting
- Simple to program and operate
- Flexible – Can be installed on any ULT freezer, which has a port hole
- The CO₂ injection pipe is designed in combination of filter, to prevent the blockage of CO₂ back-up system

- Liquid CO₂ test button to ensure the backup system is working
- Low CO₂ alarm system alerts the user when liquid CO₂ bottle is low in liquid level
- Ultra-low sound level compressors

- Stainless steel covering, more elegant
- Stainless steel input pipe design, allows for flexibility and ease of cylinder positioning
- Durable battery lasts up to 48 hours



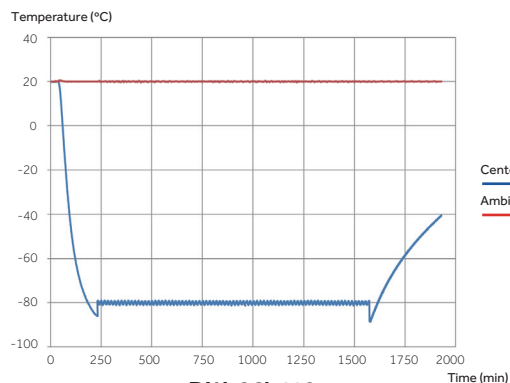
Features

- Interlocked design to turn off the LN₂ injection when the door is opened
- Protection circuit to prevent over-charging battery
- Light weight and portable design, suitable for installation on top of a freezer
- Alarm functions to include low battery and sensor error

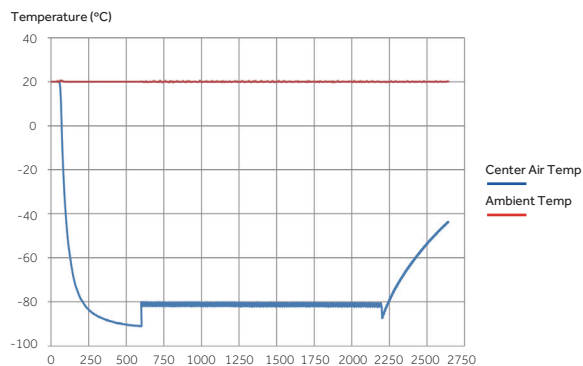
Rack Type	ULT Freezer	Freezer Rack						Freezer Rack Quantity	Total Boxes
		CAT.No.	Model	Material	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H)(mm)		
 Sliding-drawer freezer rack	DW-86L419	433001	(EXP)DCJ-55-B(SUS201)	SUS201	5*5	2 inch	686*141*291	12	300
	DW-86L579							16	400
	DW-86L729							20	500
	DW-86L829							24	600
	DW-86L419	433002	(EXP)DCJ-55-B(SUS304)	SUS304	5*5	2 inch	686*141*291	12	300
	DW-86L579							16	400
	DW-86L729							20	500
	DW-86L829							24	600

Rack Type	ULT Freezer	Freezer Rack						Freezer Rack Quantity	Total Boxes
		CAT.No.	Model	Material	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H)(mm)		
 Side-access freezer rack	DW-86L419	4330012	(EXP)DCJ-55-A(SUS304)	SUS304	5*5	2 inch	686*141*291	12	300
	DW-86L579							16	400
	DW-86L729							20	500
	DW-86L829							24	600

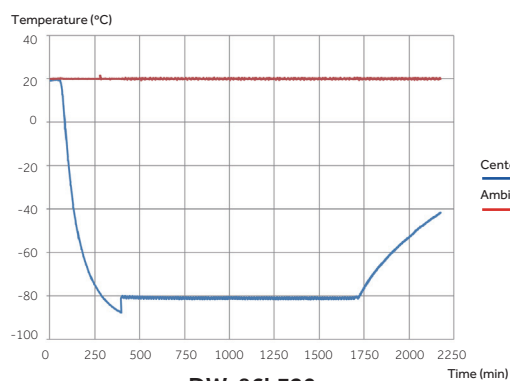
Typical Performance Characteristics at 20°C Ambient



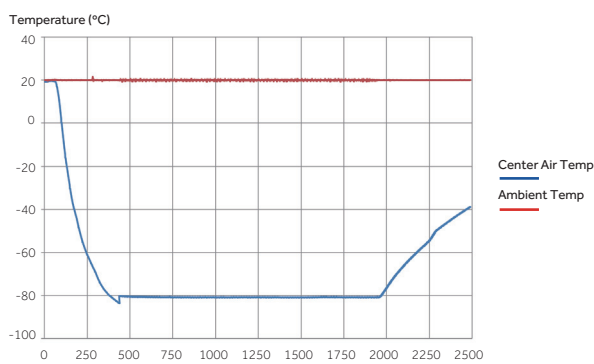
DW-86L419



DW-86L579

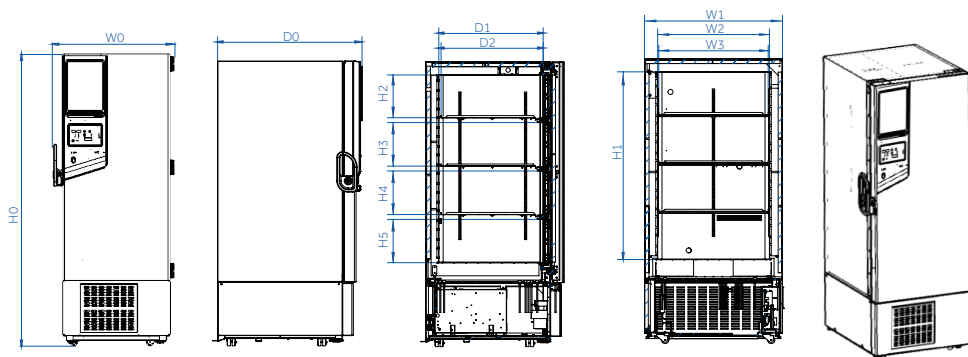


DW-86L729



DW-86L829

Product Dimension Drawings



Remark
W0=Total Width
W1=Freezer Width
W2=Inner Cabinet Width
W3=Inner Cabinet Shelf Width
D0=Total Depth
D1=Inner Cabinet Depth
D2=Inner Cabinet Shelf Depth
H0=Total Height
H1=Inner Cabinet Height
H2=1st Floor Height
H3=2nd Floor Height
H4=3rd Floor Height
H5=4th Floor Height

Parameter Model	W0	W1	W2	W3	H0	H1	H2	H3	H4	H5	D0	D1	D2
DW-86L419	830	725	465	450	1980	1310	311	308	305	318	990	716	710
DW-86L579	903	800	620	604	1980	1310	298	303	303	301	990	716	710
DW-86L729	1049	946	766	750	1980	1310	298	303	303	301	990	716	710
DW-86L829	1153	1050	870	854	1980	1310	298	303	303	301	990	716	710

Specifications



Model		DW-86L419	DW-86L579	DW-86L729	DW-86L829
Technical Data	Cabinet Type	Upright	Upright	Upright	Upright
	Ambient Temperature (°C)	10~32	10~32	10~32	10~32
	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))	47	47	52	52
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	Touch Screen LCD	Touch Screen LCD	Touch Screen LCD	Touch Screen LCD
Electrical Data	Power Supply (V/Hz)	220~240/50	220~240/50	220~240/50	220~240/50
	Power (W)	800	1000	1700	1900
Dimensions	Capacity (L/Cu.Ft)	419/14.8	579/20.5	729/25.7	829/29.3
	Net/Gross Weight (approx)	kg	255/286	300/330	350/385
		lbs	562.2/630.5	661.4/727.5	771.6/848.8
	Interior Dimensions (W*D*H)	mm	465*716*1310	620*716*1310	766*716*1310
		in	18.3*28.2*51.6	24.4*28.2*51.6	30.2*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	830*990*1980	903*990*1980	1049*990*1980
		in	32.7*39.0*78.0	35.6*39.0*77.2	41.3*39.0*78.0
	Packing Dimension (W*D*H)	mm	830*990*1980	903*990*1960	1049*990*1980
		in	32.7*39.0*78.0	35.6*39.0*77.2	41.3*39.0*78.0
	Cabinet Width (without handle and hinge)	mm	725	800	946
Functions	Container Load (20'/40'/40'H)	12/26/26	12/24/24	10/20/20	10/20/20
	High/Low Temperature Alarm	Y	Y	Y	Y
	Hot Condenser Alarm	Y	Y	Y	Y
	Power Failure Alarm	Y	Y	Y	Y
	High/Low Voltage Alarm	Y	Y	Y	Y
	Sensor Error Alarm	Y	Y	Y	Y
	Low Battery Alarm	Y	Y	Y	Y
	High Ambient Temperature Alarm	Y	Y	Y	Y
	Door Ajar Alarm	Y	Y	Y	Y
	Start-up delay	Y	Y	Y	Y
Accessories	Caster	Y(4)	Y(4)	Y(4)	Y(4)
	Leveling feet	Y(2)	Y(2)	Y(2)	Y(2)
	Porthole	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter	2*rear, (25mm) diameter
	Inner Doors	2	4	4	4
	Shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves	3- stainless steel adjustable shelves
	Shelf Dimensions (W*D) (mm)	441*657	606*649	752*650	856*650
	Max. Load per Shelf (kg)	54	72	90	108
	Freezer Racks Quantity (2" boxes)	12	16	20	24
	Capacity (2" boxes)	300	400	500	600
	USB Interface	Y	Y	Y	Y
	Remote Alarm	Y	Y	Y	Y
	5V Power Supply Port	Y	Y	Y	Y
	Temperature Chart Recorder	Optional	Optional	Optional	Optional
	RS232/485 Port	N/A / Standard	N/A / Standard	N/A / Standard	N/A / Standard
	CO ₂ Backup System	Optional	Optional	Optional	Optional
	LN ₂ Backup System	Optional	Optional	Optional	Optional
Others	Certifications	CE, MDR	CE, MDR	CE, MDR	CE, MDR