

**Haier Biomedical**  
Intelligent Protection of Life Science

# Super Energy-Saving ULT Freezer

Lowest Energy Consumption in the ENERGY STAR Ranking



- DW-86L730BPT / DW-86L830BPT -

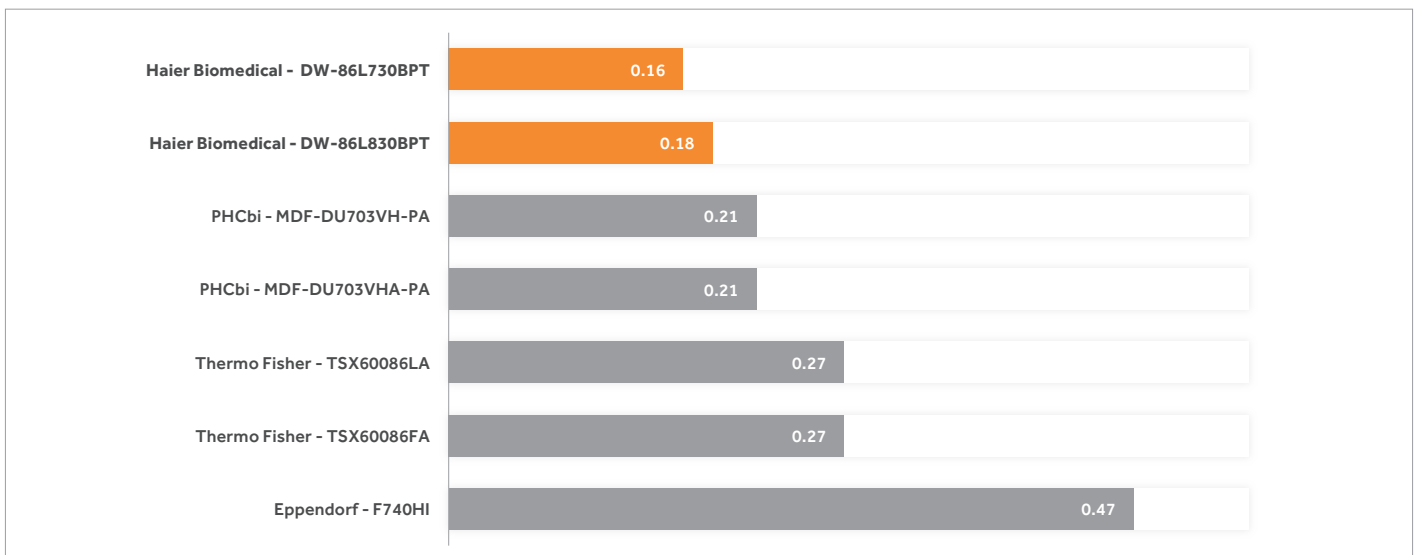
# Enhanced Energy Efficiency

Super energy-saving ULT freezer, which has been ENERGY STAR Certified, boasts the lowest daily energy consumption among all ultra-low temperature freezers, **just 4.16\* kWh per day.**

\*Date based on DW-86L730BPT



## Power Consumption (kwh/day/cu.ft.)



## Super Energy-Saving ULT Freezer VS. Its Competitors

Brand	Haier Biomedical	Haier Biomedical	PHCbi	Thermo Fisher	Eppendorf Cryocube
Series	Super Energy-Saving Series	Super Energy-Saving Series	VIP®ECO SMART	TSX	Cryocube
Model	DW-86L730BPT	DW-86L830BPT	MDF-DU703VH-PA MDF-DU703VHA-PA	TSX60086FA TSX60086LA	F740hi
Gross Capacity Liters (cu.ft.)	730(25.8)	830(29.3)	729(25.7)	815(28.8)	739(26.1)
2" Box Capacity	500	600	576	600	528
Energy Consumption (kWh/day)	4.16	5.18	5.4	7.8	12.2
Energy Consumption (kWh/day/cu.ft.)	0.16	0.18	0.21	0.27	0.47
Energy cost/year/cu.ft.	\$8.65	\$9.49	\$11.27	\$14.53	\$25.08
Energy cost/year/box	\$0.45	\$0.46	\$0.50	\$0.70	\$1.24
Energy Cost in \$ per Year (Energy Cost: \$0.147/kWh)	\$223.20	\$277.93	\$289.74	\$418.51	\$654.59
Energy Cost in \$ per 10 Years (Energy Cost: \$0.147/kWh)	\$2,232.05	\$2,779.33	\$2,897.37	\$4,185.09	\$6,545.91

\*Energy consumption from <https://www.energystar.gov/productfinder/product/certified-lab-grade-refrigeration/Website> accessed January 13, 2025

\*Energy cost from [https://www.globalpetrolprices.com/electricity\\_prices/Website](https://www.globalpetrolprices.com/electricity_prices/Website) accessed January 13, 2025

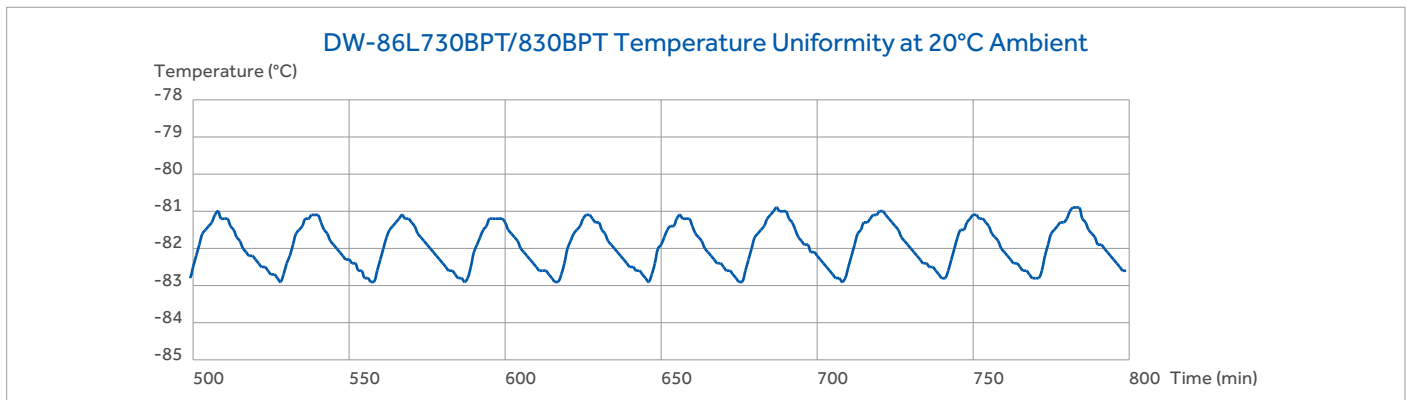
# Superior Performance

## Faster Re-Entry



Upgraded electromagnetic PEP shorten re-entry interval time to 60 seconds

## Excellent Temperature Uniformity



Under stringent high-standard testing at 20 measurement points, the temperature uniformity within the chamber can be maintained within  $\pm 2^{\circ}\text{C}$  at  $20^{\circ}\text{C}$  ambient.

## Enhanced Insulation and Cooling Technology

Thanks to the upgraded compressor and advanced insulation design, there is a great improvement in the warm-up time and door opening recovery time



**348min**

Warm-Up Time from  $-80^{\circ}\text{C}$  to  $-50^{\circ}\text{C}$



**15 min**

1 Min Door Opening Recovery Time

\*Open All Inner Doors

\* Data based on DW-86L730BPT,  $20^{\circ}\text{C}$  ambient

## Green and Environmental Friendly



HC refrigerants and insulation materials with ultra-low global warming potential (GWP) levels exert an extremely minimal impact on the environment.

# Optimized Safety Design

## Innovative Light Bar Design

Clearly indicate the operating status of the freezer and offer strengthened visual alarm indications for effortless at-a-glance monitoring.



Normal Operation

Abnormal Alert

Critical Alarm

## USB Interface

Standard USB port enables users to download historical temperature data for compliance or auditing purposes.



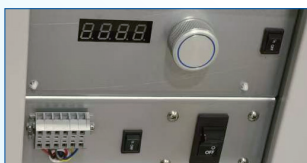
## Ergonomics Handle and Multiple Safety Lock

- Ergonomic handle makes door opening and closing effortless.
- Standard mechanical locks come with 4 keys, and padlocks can also be equipped.
- Optional fingerprint and NFC card access.



## Backup System (Optional)

Built-in backup system and independent control panel guarantees sample safety even in the event of a long power outage.



## Specifications

Model		DW-86L730BPT	DW-86L830BPT	
Technical Data	Cabinet Type	Upright	Upright	
	Climate Class	N	N	
	Cooling Type	Direct Cooling	Direct Cooling	
	Defrost Mode	Manual	Manual	
	Refrigerant	HC	HC	
	Sound Level (dB(A))	≤42	≤46	
Performance	Cooling Performance (°C)	-86	-86	
	Temperature Range (°C)	-40~-86	-40~-86	
Control	Controller	Microprocessor	Microprocessor	
	Display	Touch Screen LCD	Touch Screen LCD	
Electrical Data	Power Supply (V/Hz)	100-230/50/60	100-230/50/60	
	Max Power (W)	900	1050	
Dimensions	Capacity (L/Cu.Ft)	730/25.8	830/29.3	
	Net/Gross Weight (approx)	kg	315/368	336/390
		lbs	694.5/811.3	740.8/859.8
	Interior Dimensions (W*D*H)	mm	766*716*1310	870*716*1310
		in	30.2*28.2*51.6	34.3*28.2*51.6
	Exterior Dimensions (W*D*H)	mm	1046*998*1970	1145*998*1970
		in	41.2*39.3*77.6	45.1*39.3*77.6
	Packing Dimensions (W*D*H)	mm	1110*1150*2160	1220*1150*2160
		in	43.3*45.3*85	48*45.3*85
	Container Load (20'/40'/40'H)		10/20/20	8/20/20
Alarms	High/Low Temperature Alarm	Y	Y	
	Hot Condenser Alarm	Y	Y	
	Power Failure Alarm	Y	Y	
	High/Low Voltage Alarm	Y	Y	
	Sensor Error Alarm	Y	Y	
	Low Battery	Y	Y	
	High Ambient Temperature Alarm	Y	Y	
	Door Ajar Alarm	Y	Y	
	Start-Up Delay	Y	Y	
Accessories	Caster	Y(4)	Y(4)	
	Leveling Feet	Y(2)	Y(2)	
	Porthole	2 Rear, (15mm)Diameter	2 Rear, (15mm)Diameter	
	Inner Doors	4	4	
	Shelves	3- Stainless Steel Adjustable Shelves	3- Stainless Steel Adjustable Shelves	
	Shelf Dimensions (W*D)(mm)	752*650	856*650	
	Max. Load per Shelf (kg)	90	108	
	Freezer Racks Qty (2" boxes)	20	24	
	Capacity (2" boxes)	500	600	
	USB Interface	Y	Y	
	Remote Alarm	Y	Y	
	5V Power Supply Port	Y	Y	
	Temperature Chart Recorder	Optional	Optional	
	RS232/485 Port	NA/Standard	NA/Standard	
CO <sub>2</sub> Backup System	Optional	Optional		
LN <sub>2</sub> Backup System	Optional	Optional		
Others	Certifications	CE, UL, ENERGY STAR	CE, UL, ENERGY STAR	

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

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