

# Stirling Compact ULT Freezer



**DW-86L100STL**

## Scope of Application

It is applicable to products and samples with strict storage requirements, and ideal for long-term storage, meeting the typical storage needs of hospitals, disease control centers, research institutions, and biomedical engineering institutes.

## Innovative Design

- Low Noise
- High Uniformity
- Upgraded System and Loss Reduction
- Energy Saving and Environmental Protection
- Smart Internet of Things
- Multiple Temperature Ranges



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**Product Features**



Featuring a space-saving design, it offers full-performance ULT storage for benchtop setups, stacked arrangements, or undercounter installations.



Ideal for precisely regulated temperature changes across an expansive set point range of -86°C to -20°C, maintaining a temperature uniformity of  $\leq \pm 2^\circ\text{C}$ .



The advanced refrigeration system utilizes 100% natural refrigerants to reduce the impact on climate.



Optimized for energy efficiency delivering a power consumption of just 3 kWh/day at -80°C.



Improved pressure relief port, re-entry shortened to just 60 seconds.



The sound level is  $\leq 46\text{dB (A)}$ , creating a quiet environment.



Adopting the PID temperature control technology enables precise temperature control and keeps the temperature fluctuation within  $\pm 0.5^\circ\text{C}$  from -20°C to -86°C.



Innovative refrigeration technology without compressor and oil ensures safety, reliability and a long service life.

**Ergonomic Design**

➤ The engine room is moved up, and the height of the storage space is reduced for easy access.

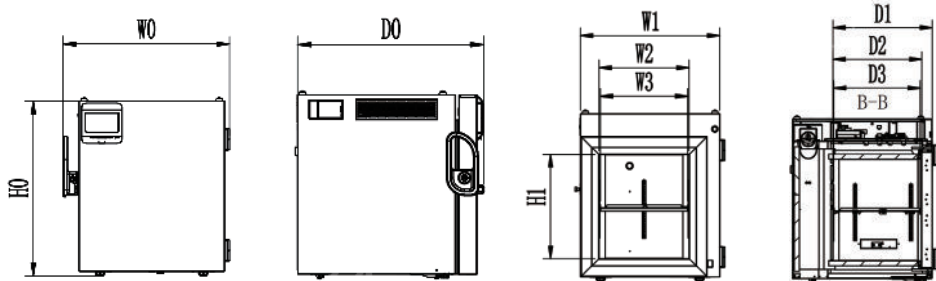
➤ An ergonomic handle and a unique slide track design make opening the door much easier.

➤ 7 inch LCD touch screen, intelligent human-computer interaction.

➤ Multiple interface configurations: standard USB interface, RS485 interface.

➤ Designed with multiple security lock and multiple security guarantee, including secret lock, padlock, optional fingerprint lock, NFC punch lock.

**Product Dimension Drawings**



DW-86L100STL

Ramark  
 W0---Overall width of the machine  
 W1---Outer width of the cabinet  
 W2---Inner liner width  
 W3---Width of inner shelf  
 (Width of shelf for effective placement of freezing rack)  
 D0---Overall depth of the machine  
 D1---Inner liner depth  
 D2---Inner depth of shelf  
 D3---Width of inner shelf  
 (Width of shelf for effective placement of freezing rack)  
 H0---Overall height of the machine  
 H1---Inner cabinet height

Model	Code	W0	W1	W2	W3	D0	D1	D2	D3	H0	H1
DW-86L100STL		779mm	705mm	440mm	426mm	820mm	496mm	444mm	432mm	816mm	505mm

**Specifications**



Model		DW-86L100STL		
Technical Data	Cabinet Type	Upright		
	Climate Class	N		
	Cooling Type	Direct cooling		
	Defrost Mode	Manual		
	Refrigerant	HC		
	Sound Level(dB(A))	≤46.3		
Performance	Cooling Performance (°C)	-86		
	Temperature Range (°C)	-20~-86		
Control	Controller	Microprocessor		
	Display	Touch Screen LCD		
Electrical Data	Power Supply (V/Hz)	220-240V/50/60Hz	110-120V/50/60Hz	
	Max Power (W)	300		
Dimensions	Capacity (L/Cu.Ft)	100/3.5		
	Net/Gross Weight	kg	110/145	
		lbs	260.2/326.3	
	Interior Dimension (W*D*H)	mm	440*444*505	
		in	17.3*17.5*19.9	
	Exterior Dimension (W*D*H)	mm	779*820*816	
		in	30.7*32.3*32.1	
	Packing Dimension (W*D*H)	mm	850*920*1000	
		in	33.5*36.2*39.4	
Cabinet Width (without handle and hinge)	mm	705		
Container Load (20'/40'/40'H)	24/52/52			
Functions	High/Low Temperature Alarm	Y		
	Hot Condenser Alarm	N		
	Power Failure Alarm	Y		
	High/Low Voltage Alarm	Y		
	Sensor Error Alarm	Y		
	Low Battery Alarm	Y		
	High Ambient Temperature Alarm	Y		
	Door Ajar Alarm	Y		
	Start-up delay	Y		
Accessories	Caster	Y		
	Leveling Feet	Y		
	Porthole	Y/1		
	Inner Doors	2		
	Shelves	1- stainless steel adjustable shelves		
	Shelf Dimensions (W*D) (mm)	425*430		
	Max. Load per Shelf (kg)	90		
	Freezer Racks Quantity (2" boxes)	6		
	Capacity (2" boxes)	72		
	USB Interface	Y		
	Remote Alarm	Y		
	5V Power Supply Port	Y		
	Temperature Chart Recorder	N		
	RS232/485 Port	NA/Standard		
	CO <sub>2</sub> Backup System	Optional		
LN <sub>2</sub> Backup System	Optional			
Others	Certifications	CE	UL	