

## -86°C Freezer (Inverter Type)



### Introduction:

The -86°C Freezer is specifically designed for the long-term preservation of highly temperature-sensitive samples. It maintains sample viability and stability at extremely low temperatures, widely used in biobanking, pharmaceutical research, clinical medicine, and food safety.

### Features

- \* The exterior is made of spray-coated cold-rolled steel plates, the interior is constructed with SUS304 stainless steel.
- \* The 10.1-inch smart full-touch Android screen displays precision at 0.1°C.
- \* Dual independent cooling systems ensure uninterrupted operation, if one system fails, the other continues to function normally. A single system can maintain long-term stable temperatures below -80°C.
- \* Five-layer door seal design ensures more uniform temperature distribution and enhanced energy efficiency.
- \* The three-lock design, incorporating a door handle lock, a padlock, and an electromagnetic lock, ensures the security of stored items. Equipped with three standard login methods: fingerprint, NFC, and password, for user convenience.
- \* Equipped with smart IoT capabilities, it allows users to monitor the freezer's status anytime via a computer-based platform.
- \* It features a sample library system that aggregates and processes information such as sample inventory, outbound status, sample quantity, and type, making it convenient for users to query.

### Technical Parameters

Model	BDF-86V418BD	BDF-86V608BD
Capacity	418L	608L
Environment Temp.	10~32°C	
Temp. Range	-40~-86°C	
Temp. Accuracy	0.1°C	
Temp. Uniformity	≤5°C	
Temp. Stability	≤6°C	
Control System	Electronic temperature control	
Display	10.1-inch full-touch Android screen	
Sensor Type	PT100	
Alarm	High/low temperature alarm, power failure alarm(72-hour duration), door open alarm, internal sensor fault alarm, condenser sensor fault alarm, ambient temperature sensor fault alarm, condenser clogging alarm, high ambient temperature alarm, power board fault alarm, power supply overpressure alarm, low battery alarm, battery disconnection alarm, reverse battery connection alarm	
Refrigeration Type	Direct-cooling	
Refrigerant	R600a/R1150/R14, 252g	R600a/R1150/R14 , 255g
Compressor	International famous brand inverter compressor/2	
Defrosting Method	Manual	
Condenser & Evaporator	Condenser: finned; copper tube Evaporator: internal coil; copper tube	
Shelf	3/Stainless steel	
Noise	≤52dB(A)	≤60dB(A)
Outer Door	1/Cyclopentane integral foaming	
Inner Door	4/Cyclopentane integral foaming	
Consumption	650W	740W
Power Supply	Standard: 220V, 50Hz Optional: 220V, 60Hz; 110V, 60Hz	
Caster	Universal casters*4 + leveling feet*2	
Standard Accessory	RS485, USB port, test port*2(φ30mm), remote alarm	
Optional Accessory	Barcode scanner, temperature recorder, liquid nitrogen backup system	
Inner Size(W*D*H)	600*612*1150mm	620*755*1280mm
External Size(W*D*H)	980*988*1940mm	1000*1147*1996mm
Package Size(W*D*H)	1130*1170*2150mm	1150*1280*2210mm
Net Weight	270kg	308kg
Gross Weight	350kg	380kg