

## -86°C Freezer



### 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.
- \* The three-lock design, incorporating a door handle lock, a padlock, and an electromagnetic lock, ensures the security of stored items.
- \* Five-layer door seal design ensures more uniform temperature distribution and enhanced energy efficiency.
- \* 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-86V168BM	BDF-86V348BM
Capacity	168L	348L
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, 175g	R600a/R1150/R14, 285g
Defrosting Method	Manual	
Condenser & Evaporator	Condenser: microchannel condenser Evaporator: internal coil; copper tube	Condenser: finned copper tube condenser Evaporator: internal coil; copper tube
Shelf	2/Stainless steel	3/Stainless steel
Noise	53dB(A)	50dB(A)
Outer Door	1/Cyclopentane integral foaming	
Inner Door	3/Cyclopentane integral foaming	2/Cyclopentane integral foaming
Consumption	400W	480W
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)	465*455*820mm	490*612*1150mm
External Size(W*D*H)	844*807*1594mm	869*989*1924mm
Package Size(W*D*H)	1000*970*1790mm	1020*1180*2130mm
Net Weight	168kg	232kg
Gross Weight	221kg	300kg