

BIOBASE

ULTRA-COLD SMART PROTECTION

-86°C ULTRA-LOW FREEZER
for the modern laboratories



608L
Capacity

-86°C
Temperature

0.1°C
Temperature Accuracy

IoT
Smart Monitoring

Engineered for Critical Sample Preservation with Dual Cooling System – Gold Standard for Laboratories

Protect what matters most.

Experience precise, contemporary control making monitoring and operation simpler than ever!

BIOBASE -86°C Ultra-Low Freezer delivers secure, stable long-term storage for critical and temperature-sensitive materials, including DNA/RNA, cell lines, stem cells, proteins, antibodies, clinical specimens, vaccines, and biological reagents. Ideal for biobanking, pharmaceutical, biotechnology, food safety, and research environments. BIOBASE provides trusted protection for your most valuable samples. - dependable performance, long-term durability, advanced security, and smarter laboratory management.



Double Protection. Uninterrupted Operation

Dual independent cooling systems ensure continuous protection — if one fails, the other instantly takes over for total peace of mind.



Stable & Precise Temperature Control

Precise temperature control 0.1°C resolution and uniform cooling helps maintain reliable storage conditions for valuable and temperature-sensitive samples.



Advanced Security & Access Control

Multi-level protection with dual-lock system, electromagnetic lock, fingerprint, password, and NFC access for user convenience and helps safeguard samples from unauthorised access.



Smart IoT Monitoring Ready

Remote monitoring of freezer status via PC with secure access to data, enabling teams to respond quickly and minimize unexpected operational risks.

Built for Daily Laboratory Operations

✓ Quick Samples Retrieval with Inventory Management

Find samples faster. Protect Temperature Stability.

Integrated sample inventory management enables quick identification and retrieval of stored samples, reducing door opening time and minimizing temperature fluctuation for improved lab efficiency.

✓ Reliable Traceability for Peace of Mind

Built-in temperature data logging

Automatically records temperature history for continuous monitoring, documentation, and audit readiness — ensuring better sample protection and operational confidence.

✓ Smart Monitoring. Smarter Lab Management.

Stay informed. Stay protected.

Advanced smart monitoring system with multi-level security and alarm protection provides real-time status updates, alarm management, operational history tracking, and user access management — helping laboratories minimise risk and maximise uptime.





Complete ULT Status at a Glance

The 10.1" Smart Full-Touch Android screen provides real-time visibility of freezer performance. Enables easy temperature adjustment, real-time temperature curve monitoring, and built-in data logging for reliable traceability.



Certifications



Energy-Efficient Design

5-layer door seal technology improves thermal efficiency and temperature consistency, while the auto-heated pressure vent supports smoother door operation.

technical specifications

Capacity		418 Liters	608 Liters
Upright Model		BDF-86V418BD	BDF-86V608BD
Compartment		4 with inner stainless steel doors	
External Dimensions (mm)		980W x 988D x 1940H	1000W x 1147D x 1996H
Internal Dimensions (mm)		600W x 612D x 1150H	620W x 755D x 1280H
Environment Temperature		Ambient 10-32°C	
Temperature Range		-40°C to -86°C	
Performance	Accuracy	0.1°C	
	Uniformity	≤5°C	
	Stability	≤6°C	
Display		10.1" Full-Touch Android Screen	
Sensor Type		PT100	
Alarm & Safety Functions		High/low temperature, Power failure, Door open, Sensor fault (Condenser/Ambient temperature), Condenser clogging, High ambient temperature, Power board fault, Power supply overpressure, Low battery, Battery disconnection, Reverse battery connection	
Refrigeration Type		Direct Cooling	
Compressor		Dual Inverted Compressor System	
Defrosting Method		Manual	
Noise		≤52 dB(A)	≤60 dB(A)
Cabinet Construction	Body	Spray-coated Cold-rolled Steel	
	Interior	SUS304 Stainless Steel Interior	
Casters		Yes, with levelling feet	
Standard Accessories		RS485, USB Port, Test Port 30mm (2), Remote Alarm, Keys, Defrost Shovel, NFC Card (2)	
Optional Accessories		Barcode Scanner, Temperature Recorder, LN2 Back-up system	
Power Supply		AC 220V, 50/60Hz	
Power Consumption		650W	740W
Shipping Dimensions (mm)		1130W x 1170D x 2150H	1150W x 1280D x 2210H
Net Weight		270kg	308kg

BIOBASE

Explore the Full ULT Series | Essential Accessories | Expert Local Support
Build Your Right-Fit Sample Protection System for Smarter Cold Storage

-25°C



-30°C



-40°C



-60°C



COMBI FREEZER



LAB REFRIGERATOR



UNDERCOUNTER



TRANSPORT SOLUTIONS



ICE CUBE/FLAKE MAKER



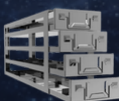
FREEZE DRYER



Optional Accessories & Consumables for ULT



Freezer Racks



Cryogenic Storage Boxes



Cryogenic Gloves



Liquid Nitrogen Storage



CO2/LN2 Back-up System



Independent Temperature DRecorder



- UPS / Voltage Stabilizer
- Calibration Service / Preventive Maintenance Services
- Wireless / IoT Monitoring Subscription

Speak to our specialists for product recommendation and application advice.

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