



BIO GUARD 358

-80°C Freezer



Efficient cooling circuit

With a unique design including an auto-cascade cooling circuit and a mix of refrigerant gas, our equipment delivers an amazing cooling efficiency.



Excellent Performance

Our freezers are optimized for daily use, with excellent temperature homogeneity, quick pulldown time, and fast recovery after each door opening.



Double door design

Our four independent inner door design reduces heat loss and improves insulation.

Engineered for maximum performance, the refrigeration system design ensures reliable and consistent results.

Leveraging advanced auto-cascade refrigeration technology, our solution delivers superior cooling power—guaranteeing safe and secure storage at -80°C, even in the most demanding operating environments.

Our new Bio Guard 358 freezer offers one of the best value-for-performance ratios on the market. An economical solution designed for efficient -80°C sample storage, combining optimized internal capacity with a compact footprint.

MODEL AVAILABLE

BMBG35880G	358 L
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WARRANTY

Parts	2 years
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Fan, compressors and condenser	5 years
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VIP insulation	10 years
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Technical Specifications

ULT FREEZER BIO GUARD 358 L, -80°C	
MODEL	BMBG35880G
GENERAL SPECIFICATIONS	
Storage Capacity	358 liters, 24,000 2 ml cryo-tubes
Compartments	4
Ext Dimension (W x D x H)	795 x 885 x 1855 mm
Int Dimension (W x D x H)	450 x 583 x 1326 mm
Ext Construction	Electro-galvanized steel epoxy paint
Int Construction	Electro-galvanized steel epoxy paint
Net Weight	160 kg
Standard Construction	4 swivel casters • 2 levelling feet • Lockable door • 2 Cable ports, 25 mm diameter for external monitoring probes • 1 power cord, 1.7 m long
No. of Internal Shelves	3 shelves, Max capacity per shelf: 49kg
Ambient temperature	From +18°C to +32°C
Insulation	6 faces, new generation of Vacuum Insulation Panel (VIP) and polyurethane foam < 0.005 W/m/K
Noise level	50 dB
Environment	Non-corrosive, non-flammable, non-explosive
Warranty	2 years. 5 years: fan, compressors, condenser. 10 years: VIP insulation
CONTROL	
Display	LED Screen
Software	Allow management of set temperature • High & low temperature alarm • Room temperature alarm (if out of range) • Door Alarm • Embedded keyboard • Settings of date, hour, day, month and year • Pass code • Data recording on USB stick
Settings	Temperature • Alarms • Date/Hour
Communication	USB port, alarm contact
COOLING CIRCUIT	
Cooling Engine	Self-cascade
Expansion Device	Capillary tube
Defrosting Method	Manual defrosting
Heat rejection	3521 BTU/h
Natural Gas Refrigerant Load	Mix of refrigerant gas: R601a/R290/R1150
ELECTRIC AND ELECTRONIC DATA	
Controller type	Microprocessor
Control sensor	Pt100 sensor
List of alarms	see above
Type of alarm	Visual and acoustic
Energy consumption	9.6 kWh/ day*
Remote alarm contact	Included. Can output one NC or NO signal
Power	610 W
Types of power supply	220-240V, 60 Hz, Current: 5.3A - 220-240V, 50 Hz, Current: 5.3A
Battery back-up	16 hr display and alarm back-up Rechargeable 12V
PERFORMANCES (AMBIENT TEMPERATURE +22 °C)	
Temperature range	From -40°C to -86°C, 1/10th degree display
Pull down ambient to -80°C (+/-5°C)	3.6 hours
Homogeneity at -80°C	+/-5°C
OPTIONS & CONFORMITIES	
Options / accessories	Backup system with CO2 / LN2 (with valve compatible with 150 bar max.) 5x4 stainless steel 304 racks Dimensions (mm) : 140x549x293 Pack of 16 racks (total storage of 240 Boxes, 24,000 2ml cryo tubes) 9-point COFRAC temperature mapping with IQ/QO documentation User manual available on line Detachable washable filter Scraper
Conformities	EN61326-1 (2013) Safety requirements for electrical equipment for measurement – Part 1: General requirements 2014/35/UE – Low voltage directive – EN IEC 61326-1 (2021) EMC directive
Shipping weight	206 kg

*Set temperature -81°C, Ambient temperature 25°C (+/-0.5°C), door closed.