

BioSafe-MINI

Under-counter ULT Freezer



ANTECH's compact under-counter ULT freezer MDF-86U108 is an ideal solution to store biological materials in a limited space. The freezer size is designed to match laboratory table height, so that it can be put under counter.

BioSafe-MINI adopts high efficiency single compressor cooling system, with reduced energy consumption and lower noise.

TC-300 touch screen smart controller is used. Despite a compact freezer, the functions are complete for medical and laboratory applications, including data storage and USB port for download, high/low temperature alarm, door open alarm, power failure alarm, remote alarm contact, etc. Therefore, MDF-86U108 meets the most rigorous requirements of healthcare and scientific research.



LOW CO₂
EMISSIONS



DOOR AJAR
ALARM



CFC /HCFC
FREE



USB PORT



POWER FAILURE
ALARM



DIRECT
COOLING



SAFETY DOOR
LOCK

TC-300 touch screen controller

TC-300 smart control system is adopted for easy observation and convenient operation.

- 7" LCD touch screen: sensitive touch, user-friendly HIM;
- Large display of chamber temperature, easy observation at distance;
- Status icon to show freezer situation at first sight: normal or abnormal;
- Password administration to prevent unauthorized change of settings;
- Show temperature curve on touch screen;
- Temperature and event data storage and USB port for download.



PERFORMANCE

- Single compressor cooling system with high efficiency
- SECOP brand compressor & EBM brand blower.
- High density polyurethane forming for insulation.
- Forming inner doors for better insulation

ERGONOMIC DESIGN

- 7-inch touch screen for easy operation
- Forming inner doors with door seal for better insulation and less frost
- Adjustable stainless steel shelves to load different size products
- Pressure release port for easy opening of outer door
- Ultra-quiet design reduces noise level
- Optional sliding drawer rack & side access rack for 2ml vials, 5ml vials or SBS boxes

ENVIRONMENT FRIENDLY

- Natural refrigerant compliant with EPA and SNAP non-ozone depleting mandates
- CFC-Free polyurethane foaming insulation
- High efficiency cooling system for lower energy consumption and less carbon emission

ALARMS

- High temperature
- Low temperature
- High ambient temperature
- Door ajar
- Power failure
- Sensor error

SAFETY

- Build-in data storage and USB port for download
- Temperature quick check via temperature curve
- Password protection avoids key parameters unauthorized change
- Safety door lock, preventing unauthorized access
- Access port for additional temperature probe
- Remote alarm contacts
- Optional online monitoring system
- Optional CO2/LN2 backup system

-86°C

BioSafe-MINI



Model		MDF-86U103
Basic	Type	Under-counter, upright
	Cooling technology	Single compressor
	Temperature setting range (°C)	-40~-86
	Climate type	N
	Capacity (L)	88
	2" box storage Qty (Pcs)	60
	Door entrance limit (≥mm)	676
	Cooling type	Direct
	Defrost type	Auto
	Refrigerant	Mixed gas
	Number of compressor	1
Control	Controller	TC-300
	Display	7" LCD touch screen
	Temperature display accuracy	0.1
	Password protection	●
	USB port	●
	Cloud monitoring (Wi-Fi)	○
	Chart recorder	○
Power	Power supply (V/Hz)	220/50; 220/60; 120/60
	Rated power (W)	410; 460; 520
	Rated current (A)	2.3; 2.6; 6.6
Alarm	Visible/audible alarm	●
	High/Low temperature	●
	Hot condenser	●
	Power failure	●
	Sensor failure	●
	High ambient temperature	●
	Door open	●
	Remote alarm contact	●
Accessories	Safety door lock	●
	Inner door	2
	Test access port	Φ19mm x 2
	Adjustable shelves	1
	Freezer rack	○
	Rack type (DxH)	3x5
	Rack Qty	4
	Pressure equalization port	Manual
	Casters	●
Material	CO2/LN2 backup system	○
	Exterior	Pre-coated steel
	Interior	Pre-coated steel
	Insulation	Polyurethane
	Vacuum insulation panel (VIP)	●
	Cabinet insulation thickness (mm)	90
Weight & size	Outer door thickness (mm)	90
	Net weight (kg)	85
	Gross weight (kg)	105
	Internal W×D×H (mm)	320×450×610
	External W×D×H (mm)	800×700×870
	Packing W×D×H (mm)	850×730×953
	Packing volume (m3)	0.59

● Basic equipment ○ Optional / Not available

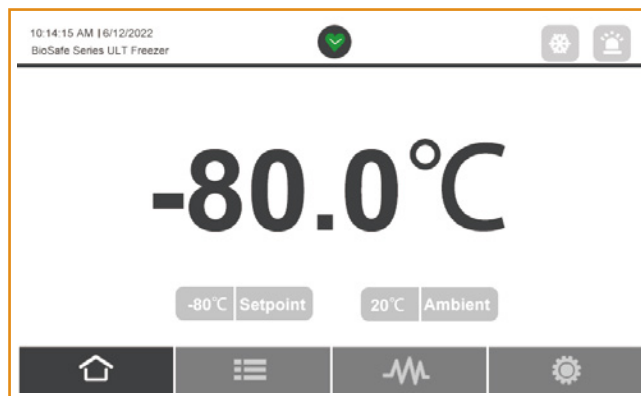
-86°C Chest ULT Freezer

BioSafe series chest ULT freezers are stable in performance, convenient in operation and durable in use. 130L freezer adopts high efficiency single compressor system, while 495L & 746L freezers adopts 2-compressor cascade system for stable performance and lower power consumption.

TC-300 touch screen controller

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- Large display of chamber temperature, easy observation at distance;
- Status icon to show freezer situation at first sight: normal or abnormal;
- Password administration to prevent unauthorized change of settings;
- Show temperature curve on touch screen;
- Temperature and event data storage and USB port for download.



LOW CO2
EMISSIONS



CFC /HCFC
FREE



USB PORT



POWER FAILURE
ALARM



DIRECT
COOLING



SAFETY DOOR
LOCK

PERFORMANCE

- Optimized cooling system with high efficiency
- SECOP brand compressor & EBM brand blower.
- High density polyurethane forming for insulation.
- Forming inner doors for better insulation

ERGONOMIC DESIGN

- 7-inch touch screen for easy operation
- Forming inner doors with door seal for better insulation and less frost
- Adjustable stainless steel shelves to load different size products
- Pressure release port for easy opening of outer door
- Ultra-quiet design reduces noise level
- Optional sliding drawer rack & side access rack for 2ml vials, 5ml vials or SBS boxes

ENVIRONMENT FRIENDLY

- Natural refrigerant compliant with EPA and SNAP non-ozone depleting mandates
- CFC-Free polyurethane foaming insulation
- High efficiency cooling system for lower energy consumption and less carbon emission

ALARMS

- High temperature
- Low temperature
- High ambient temperature
- Door ajar
- Power failure
- Sensor error

SAFETY

- Build-in data storage and USB port for download
- Temperature quick check via temperature curve
- Password protection avoids key parameters unauthorized change
- Safety door lock, preventing unauthorized access
- Access port for additional temperature probe
- Remote alarm contacts
- Optional online monitoring system
- Optional CO2/LN2 backup system

-86°C

Chest type



	Model	MDF-86C118	MDF-86C458	MDF-86C728
Basic	Type	Chest	Chest	Chest
	Cooling technology	Single compressor	Cascade cooling	Cascade cooling
	Temperature setting range (°C)	-40~-86	-40~-86	-40~-86
	Climate type	N	N	N
	Capacity (L)	130	495	746
	2" box storage Qty (Pcs)	96	360	585
	Door entrance limit (≥mm)	740	780	997
	Cooling type	Direct	Direct	Direct
	Defrost type	Manual	Manual	Manual
	Refrigerant	Mixed gas	Hydrocarbon gas	Hydrocarbon gas
	Number of compressor	1	2	2
Control	Controller	TC-300	TC-300	TC-300
	Display	7" LCD touch screen	7" LCD touch screen	7" LCD touch screen
	Temperature display accuracy	0.1	0.1	0.1
	Password protection	●	●	●
	USB port	●	●	●
	Cloud monitoring (Wi-Fi)	○	○	○
	Chart recorder	○	○	○
Power	Power supply (V/Hz)	220/50; 220/60; 120/60	220/50; 220/60; 120/60	220/50; 220/60; 120/60
	Rated power (W)	480; 480; 540	900; 850; 780	980; 900; 820
	Rated current (A)	2.8; 2.8; 6.7	7.0; 5.0; 8.8	7.2; 5.8; 9.0
Alarm	Visible/audible alarm	●	●	●
	High/Low temperature	●	●	●
	Hot condenser	●	●	●
	Power failure	●	●	●
	Sensor failure	●	●	●
	High ambient temperature	●	●	●
	Door open	●	●	●
	Remote alarm contact	●	●	●
Accessories	Safety door lock	●	●	●
	Inner door	/	2	2
	Test access port	Φ 20mm x 2	Φ 20mm x 2	Φ 20mm x 2
	Adjustable shelves	N/A	N/A	N/A
	Freezer rack	○	○	○
	Rack type (D×H)	1×8	1×10	1×13
	Rack Qty	12	36	45
	Pressure equalization port	Manual	Auto x 1 & manual x 1	Auto x 1 & manual x 1
	Casters	●	●	●
	CO2/LN2 backup system	○	○	○
Material	Exterior	Pre-coated steel	Pre-coated steel	Pre-coated steel
	Interior	Stainless steel	Stainless steel	Stainless steel
	Insulation	Polyurethane	Polyurethane	Polyurethane
	Vacuum insulation panel (VIP)	●	●	●
	Cabinet insulation thickness (mm)	90	90	90
	Outer door thickness (mm)	90	90	90
Weight & size	Net weight (kg)	98	242	275
	Gross weight (kg)	116	278	318
	Internal W×D×H (mm)	630×440×470	1310×600×600	1310×740×730
	External W×D×H (mm)	850×740×1023	1965×860×910	1965×1000×1040
	Packing W×D×H (mm)	930×780×1160	2010×880×1030	2010×1095×1165
	Packing volume (m3)	0.84	1.82	2.56

● Basic equipment ○ Optional / Not available