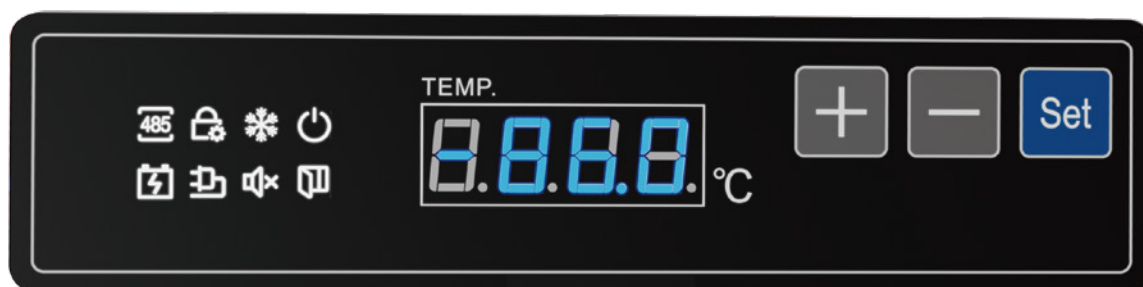# BioSafe-AIR ULT Freezer
Single compressor

BioSafe-AIR series compact ULT freezers allow users to store biological products with more flexibility. MDF-86U50 is a desk-top model, while MDF-86U100 is an under-counter freezer. Both 2 models are stackable.

TC-300A Controller

Microprocessor electronic controller TC-300A, fitted with dual LED screen to display inner chamber temperature and key working conditions. Advanced dual sensor control system for accurate temperature control.

| LOW CO2 EMISSIONS | DOOR AJAR ALARM | STACKABLE DESIGN | USB PORT | POWER FAILURE ALARM | SAFETY DOOR LOCK |

PERFORMANCE

• High efficiency single compressor refrigeration system
• V.I.P. (vacuum insulation panel) for excellent insulation
• Honeywell Solstice® liquid blowing agent (LBA) for better insulation
• Forming inner door(s) with door seal for better insulation

ALARMS

• High temperature
• Low temperature
• High ambient temperature
• Door open
• Power failure
• Sensor error
• High condenser alarm
• Low battery

ERGONOMIC DESIGN

• Compact design for desk-top or under-counter usage
• Silent running creating a user-friendly environment
• Stackable design to save space
• Stainless steel interior for easy cleaning
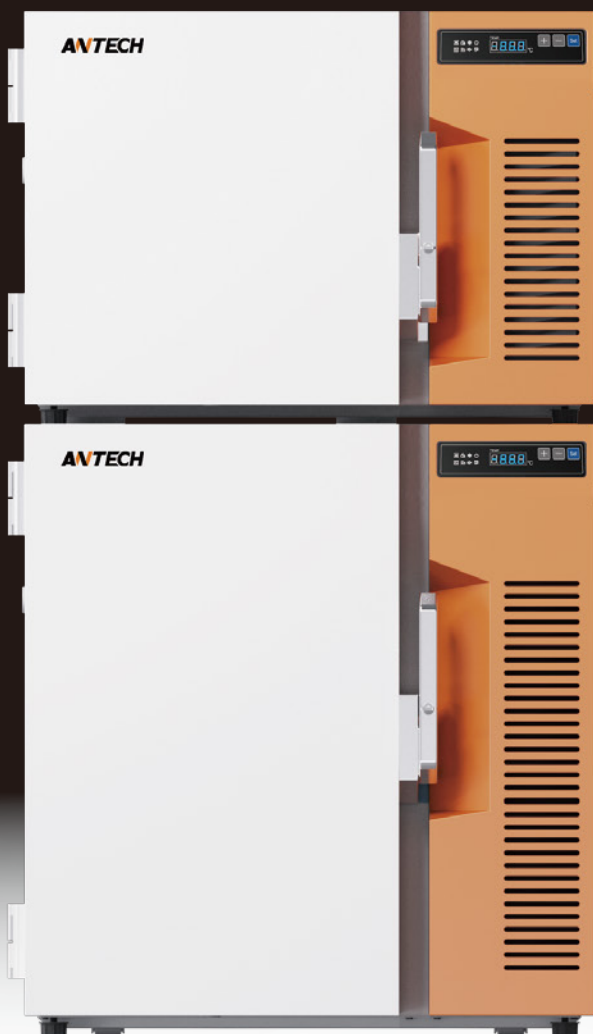• Pressure release port to allow door open with shorter interval

SAFETY

• Password protection avoids key parameters unauthorized change
• Safety door lock, preventing unauthorized access
• Test access port for additional temperature probe
• Remote alarm contacts
• Optional build-in data storage and USB port for download
• Optional online monitoring system(CryoMonitor 2000TF)
• Optional CO2/LN2 backup system

ENVIRONMENT FRIENDLY

• CFC-Free polyurethane foaming insulation
• Honeywell Solstice® liquid blowing agent (LBA) makes environment green
• High efficiency cooling system for lower energy consumption and less carbon emission

High class interior
Stainless steel interior
Forming inner door
Rust-free & easy cleaning

Ergonomic door handle
Light operation, friendly to ladies
Safety lock to prevent unauthorized access
Mid-positioned design, handle operation not
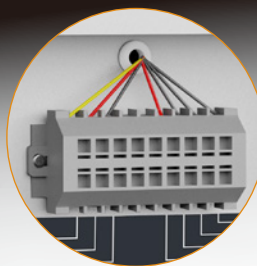influenced by wall or table side

Stainless steel shelf
Adjustable position in the chamber
Removeable to store large size product
Stainless steel for easy cleaning

Test access port
For easy access of additional
temperature probe

Remote alarm contact
NO (normally open)
NC (normally close)

Stackable design:
Upper: MDF-86U50
Lower: MDF-86U100

CryoMonitor 2000TF (optional)
Cloud based temperature monitoring system
Email & SMS alarms
USB port for data storage and download

-86°C
BioSafe-AIR

Model	MDF-86U50	MDF-86U100
Basic Type	Upright, desk-top	Upright, under-counter
Stackable	●	●
Temperature setting range (°C)	-40~-86	-40~-86
Climate type	N	N
Capacity (L)	58L	100L
2" box storage Qty (Pcs)	30	60
Cooling type	Direct	Direct
Defrost type	Manual	Manual
Refrigerant	Mixed gas	Mixed gas
Number of compressor	1	1
Door entrance limit (≥mm)	680	680
Control Controller	TC-300A	TC-300A
Display	LED	LED
Display accuracy	0.1	0.1
Password protection	●	●
Power USB port	○	○
Cloud monitoring (Wi-Fi)	○	○
Power supply (V/Hz)	120V,60；220V,50/60	120V,60；220V,50/60
Rated power (W)	260	450
Rated current (A)	2.9	2.9
Alarm Visible/audible alarm	●	●
High/Low temperature	●	●
Remote alarm contact	●	●
Hot condenser	●	●
Power failure	●	●
Sensor failure	●	●
High ambient temperature	●	●
Door open	●	●
Accessories Door lock with key	●	●
Inner forming door	1	2
Test access port	1	1
Adjustable foot	4	4
Scroll wheel	/	2
Stackable kit	○	○
Pressure equalization port	●	●
Adjustable shelves	/	1
Freezer rack	○	○
Rack type (DxH)	5x3	5x3
Rack Qty	2	4
CO2/LN2 backup system	○	○
Material Exterior	Powder coated galvanized steel sheet	Powder coated galvanized steel sheet
Interior	Stainless steel	Stainless steel
Insulation	Polyurethane+LBA	Polyurethane+LBA
Vacuum insulation panel (VIP)	●	●
Weight & size Cabinet insulation thickness (mm)	80	80
Outer door thinkness (mm)	80	80
Net weight (KGs)	84	108
Intermal W×D×H (mm)	340x460x364	340x460x630
Extermal W×D×H (mm)	760x680x550	760x680x818

● Basic equipment   ○ Optional