

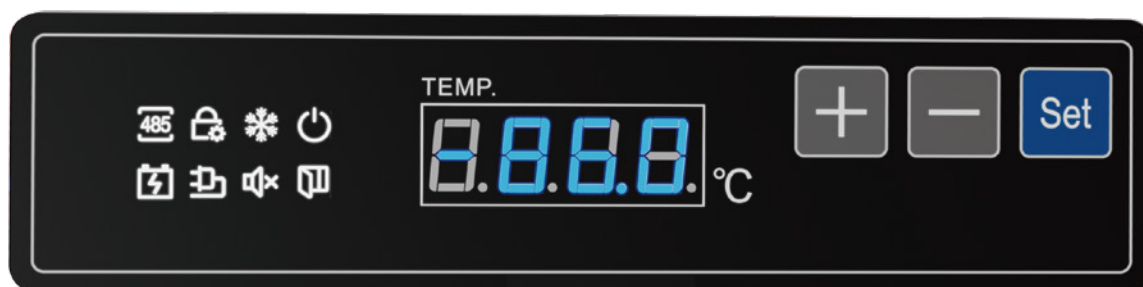
# BioSafe-AIR ULT Freezer

## 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

### 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

### 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

### ALARMS

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

### SAFETY

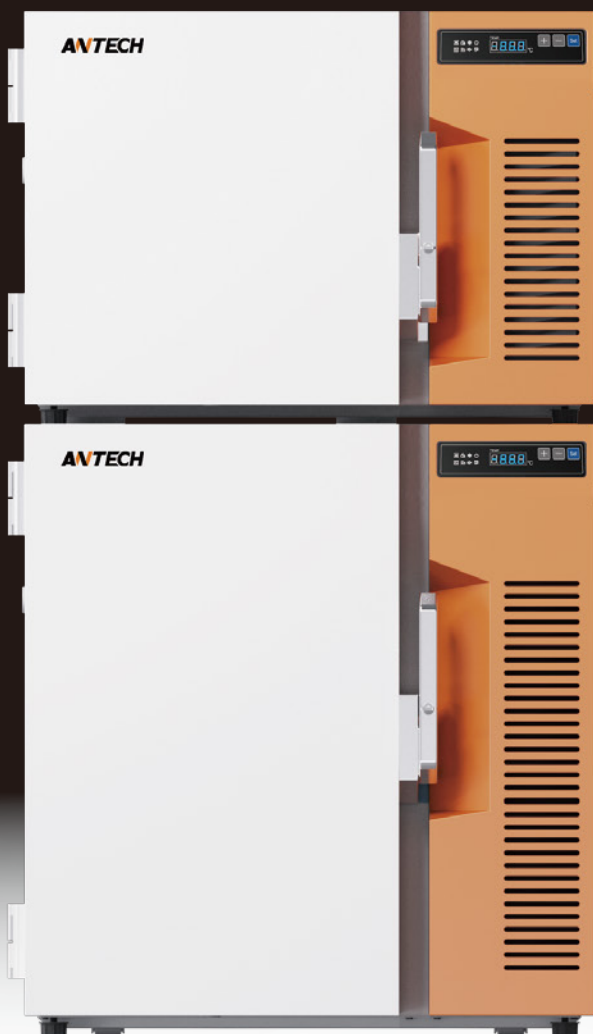
- Password protection avoids key parameters unauthorized change
- Safety door lock, preventing unauthorized access
- Test access port for additional temperature probe
- Remote alarm contacts
- Optional build-in data storage and USB port for download
- Optional online monitoring system(CryoMonitor 2000TF)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



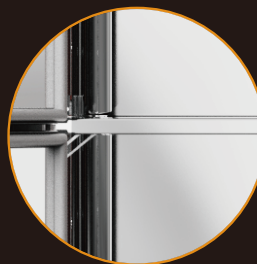
- ▶ **High class interior**  
Stainless steel interior  
Forming inner door  
Rust-free & easy cleaning



- ▶ **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



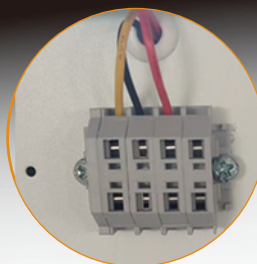
**Stackable design:**  
Upper: MDF-86U50  
Lower: MDF-86U100



- ▶ **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)



- ▶ **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
Control	Door entrance limit (≥mm)	680	680
	Controller	TC-300A	TC-300A
	Display	LED	LED
	Display accuracy	0.1	0.1
Power	Password protection	●	●
	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
Alarm	Rated current (A)	2.9	2.9
	Visible/audible alarm	●	●
	High/Low temperature	●	●
	Remote alarm contact	●	●
	Hot condenser	●	●
	Power failure	●	●
	Sensor failure	●	●
	High ambient temperature	●	●
Accessories	Door open	●	●
	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
Material	CO2/LN2 backup system	○	○
	Exterior	Powder coated galvanized steel sheet	Powder coated galvanized steel sheet
	Interior	Stainless steel	Stainless steel
	Insulation	Polyurethane+LBA	Polyurethane+LBA
Weight & size	Vacuum insulation panel (VIP)	●	●
	Cabinet insulation thickness (mm)	80	80
	Outer door thickness (mm)	80	80
	Net weight (KGs)	84	108
	Internal W×D×H (mm)	340x460x364	340x460x630
	External W×D×H (mm)	760x680x550	760x680x818

● Basic equipment ○ Optional