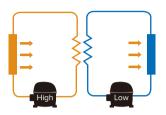
## -86°C Ultra-low Temperature Freezer

ANTECH offers advanced BioSafe ULT freezers with optimized cooling system and ergonomic design. Both upright freezers and chest freezers are available, from 88 liter compact freezer to 838 liter large volume biobanking freezer. Various of high efficiency cooling systems to meet different requirements of users. Dual compressor cooling technology (BioSafe-DUAL) are adopted on ANTECH ULT freezers, providing lowest energy consumption & highest level protection.

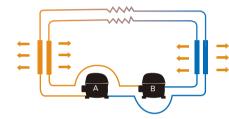
#### BioSafe-ECO series



### 2-compressor cascade system, SECOP brand;

Hydrocarbon refrigerant for lower power consumption; Capacity: 338L, 408L, 588L, 728L, 838L.

### BioSafe-DUAL series

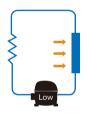


### Independent dual compressor system:

inner temperature maintain -75°C when one compressor fails;

Capacity: 408L, 588L, 728L, 838L.

### BioSafe-MINI series BioSafe-AIR series



#### Single compressor cooling system

compact construction with high efficiency, reach -86°C with 1 compressor; Capacity: 58L, 88L, 100L

### Upright freezers

Capacity	58L	88L	100L	338L	408L	588L	728L	838L
BioSafe-MINI	-	MDF-86U108	-	-	-	-	-	-
BioSafe-ECO	-	-	-	MDF-86U340T	MDF-86U458T	MDF-86U588T	MDF-86U728T	MDF-86U838T
BioSafe-DUAL	-	-	-	-	MDF-86U458D	MDF-86U588D	MDF-86U728D	MDF-86U838D
BioSafe-AIR	MDF-86U50	-	MDF-86U100	-	-	=	-	-

### Chest freezers

Capacity	130L	495L	746L
BioSafe-MINI	MDF-86C118	-	-
BioSafe-ECO	-	MDF-86C458	MDF-86C728

### 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



DOOR AJAR ALARM



STACKABLE DESIGN



USB PORT



POWER FAILURE



SAFETY DOOR

### 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**

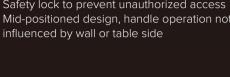
- CFC-Free polyurethane foaming insulation
- · Honeywell Solstice® liquid blowing agent (LBA) makes environment green
- ${\mbox{\ }}{\mbox{\ }}$  High efficiency cooling system for lower energy consumption and less carbon emission



► 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







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



For easy access of additional temperature probe



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



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	Туре	Upright, desk-top	Upright, under-counter
	Stackable	•	•
	Temperature setting range (°C)	-40 <sup>~</sup> -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
TILIOI	Display accuracy	0.1	0.1
Power	Password protection	•	•
	USB port	0	0
	Cloud monitoring (Wi-Fi)	0	0
	Power supply (V/Hz)	110V,50/60; 220V,50/60	110V,50/60; 220V,50/60
	Rated power (W)	260	450
	Rated current (A)	2.9	2.9
	Visible/audible alarm	•	•
	High/Low temperature	•	•
	Remote alarm contact	•	•
	Hot condenser	•	•
ırm	Power failure	•	•
	Sensor failure	•	•
	High ambient temperature	•	•
	Door open	•	•
	Door lock with key	•	•
	Inner forming door	1	2
	Test access port	1	1
Accessories	Adjustable foot	4	4
	Scroll wheel	/	2
	Stackable kit		0
	Pressure equalization port	0	•
	Adjustable shelves	1	1
	Freezer rack		
	Rack type (DxH)	0	0
		5x3	5x3
	Rack Qty CO2/LN2 backup system	2	4
	Exterior	O Douglar pasted galvanized steel sheet	O Powder cented galvanized steel sheet
		Powder coated galvanized steel sheet	Powder coated galvanized steel sheet
Material	Interior	Stainless steel	Stainless steel
	Insulation	Polyurethane+LBA	Polyurethane+LBA
Weight & size	Vacuum insulation panel (VIP)	•	•
	Cabinet insulation thickness (mm)	80	80
	Outer door thinkness (mm)	80	80
	Net weight (KGs)	84	108
	Intermal W×D×H (mm)	340x460x364	340x460x630

• Basic equipment O Optional