

# -150°C Cryogenic Freezer

The -150 °C cryo freezer provides a safe, convenient and economical alternative for long term storage for a variety of biological specimens at cryogenic temperature (below -135°C).

Compared with liquid nitrogen containers, there is no need to supply liquid nitrogen for mechanical freezers. It is easier to use and contamination risk caused by liquid nitrogen is avoided.

ANTECH adopted innovative 2-compressor cascade cooling system for its cryogenic freezers, realizing lower power consumption, faster cooling rate and lower noise level.



LOW CO2  
EMISSIONS



NATURAL  
REFRIGERANT



CFC /HCFC  
FREE



HIGH/LOW  
TEMPERATURE ALARM



POWER FAILURE  
ALARM



DIRECT  
COOLING



SAFETY DOOR  
LOCK

## PERFORMANCE

- Optimized cooling system & high efficiency hydrocarbon refrigerant.
- SECOP brand compressor & EBM brand blower.
- High density polyurethane forming for insulation.

## ALARMS

- High temperature
- Low temperature
- Power failure
- Sensor error

## ERGONOMIC DESIGN

- Forming inner doors for better insulation and less frost
- SUS304 interior for easy cleaning
- Ultra-quiet design reduces noise level
- Optional slim rack for convenient operation

## SAFETY

- Safety door lock, preventing unauthorized access
- Access port for additional temperature probe
- Optional online monitoring system
- Optional CO2/LN2 backup system

## 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

# -150°C

## Cryo Freezer



Model		MDF-150C118			MDF-150C208
Main specifications	Type	Chest			Chest
	Cooling technology	2-compressor cascade system			2-compressor cascade system
	Temperature setting range (°C)	-125 ~ -150			-125 ~ -150
	Climate type	N			N
	Capacity (L)	118			258
	2" box storage Qty (Pcs)	54			165
	Net weight (KGs)	165			280
	Internal W×D×H (mm)	540×400×560			780×500×660
	External W×D×H (mm)	1275×795×990			1510×885×1095
	Door entrance limit (≥mm)	780			885
	Cooling type	Direct			Direct
	Defrost	Manual			Manual
	Number of compressor	2			2
	Number of compressor	2			2
Control & display system	Controller	Microprocessor			Microprocessor
	Display	LED			LED
	Temperature display accuracy	0.1			0.1
Power	Power supply (V/Hz)	220/50	220/60	120/60	220/50
	Rated power (W)	1800	1800	1800	2450
	Rated current (A)	10.0	10.0	19.8	5.0
Alarm functions	Visible/audible alarm	Yes			Yes
	High/Low temperature	Yes			Yes
	Power failure	Yes			Yes
	Sensor failure	Yes			Yes
Accessories	Inner door	1			2
	Castors	6			6
	Test access port	Φ 20mm x 1			Φ 20mm x 1
	Safety door lock	Yes			Yes
	Freezer rack	Optional			Optional
	Rack model	CFC-9-2, 1×9			CFC-11-2, 1×11
	Rack Qty	6			15
	LN2 backup system	Optional			Optional
Material	Exterior	Pre-coated steel			Pre-coated steel
	Interior	SUS304			SUS304
	Insulation	Polyurethane			Polyurethane
	Cabinet insulation thickness (mm)	150mm			150mm
	Outer door thickness (mm)	105mm			105mm
	Compressor brand	SECOP			SECOP
Shipping	Gross weight (KGs)	208			292
	Packing W×D×H (mm)	1340×860×1140			1570×960×1230
	Volume (m³)	1.31			1.85