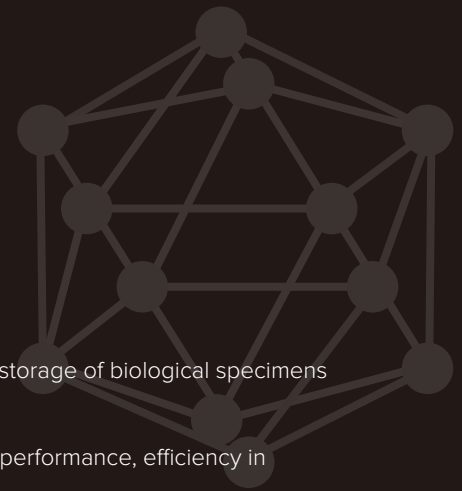


# CryoSafe Series

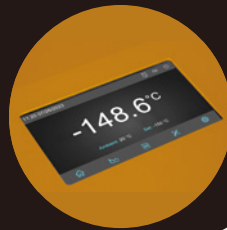
## -150°C Cryogenic Freezer



CryoSafe series -150°C cryogenic freezers provide a safe, clean and convenient solution for storage of biological specimens at cryogenic temperature (-135°C or below).

CryoSafe series adopts innovative 2-compressor cascade cooling system, which is stable in performance, efficiency in energy consumption and quite in running.

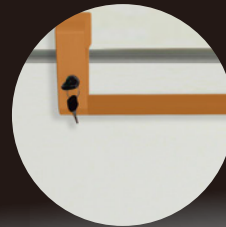
Compared with liquid nitrogen freezers, CryoSafe series mechanical freezers are liquid nitrogen free, therefore, the inconvenience of LN<sub>2</sub> supply is avoided. There is also no contamination risk caused by LN<sub>2</sub>.



▶ Touch screen controller



▶ USB port



▶ Door lock



▶ Switch for backup battery



▶ Remote alarm contact



LOW CO<sub>2</sub> EMISSIONS



CFC /HCFC FREE



HIGH/LOW TEMPERATURE ALARM



POWER FAILURE ALARM



DIRECT COOLING



SAFETY DOOR LOCK

# TC-320 Controller

- 7" LCD touch screen, convenient to operate
- Large display of chamber temperature, easy observation at distance
- Temperature data storage & USB download, temperature curve display
- Even & alarm information storage and USB download
- Password protection preventing unauthorized operations



## PERFORMANCE

- Optimized cascade cooling system with stable performance and 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
- Large display of chamber temperature, easy observation at distance
- Adjustable stainless steel shelves to load different size products
- Pressure release port for easy opening of outer door
- Ultra-quiet design reduces noise level

## ENVIRONMENT FRIENDLY

- 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

- Temperature data storage & USB download, temperature curve display
- Even & alarm information storage and USB download
- Password protection for touch screen, preventing unauthorized operation
- Safety door lock, preventing unauthorized access
- Access port for additional temperature probe
- Remote alarm contacts
- Optional LN2 backup system

# -150°C Cryo Freezer



Model		MDF-150C138	MDF-150C226
Basic	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)	138	226
	81/100-place box	96	160
	Cooling type	Direct	Direct
	Defrost type	Manual	Manual
	Door entrance limit (≥mm)	780	885
	Compressor	SECOP x 2	SECOP x 2
	Control	Controller	7" touch screen
Temperature display accuracy		0.1	0.1
Power	Power supply (V/Hz)	220/50, 220/60	220/50, 220/60
	Rated power (W)	1438W, 1550W	1548W, 1672W
	Rated current (A)	7.4A, 7.71A	7.65A, 7.98A
Alarm	Visible/audible alarm	●	●
	High/Low temperature	●	●
	Power failure	●	●
	Sensor failure	●	●
	Door ajar	●	●
Accessories	Safety door lock	●	●
	Inner door	2	2
	Test access port	Φ19mm x 2	Φ19mm x 2
	Freezer rack	○	○
	Rack model	CFC-8-2	CFC-8-2
	Rack Qty	12	20
	Casters	4	4
LN <sub>2</sub> backup system	○	○	
Material	Exterior	Pre-coated steel	Pre-coated steel
	Interior	Stainless steel	Stainless steel
	Insulation	Polyurethane	Polyurethane
	Cabinet insulation thickness (mm)	150	150
	Outer door thickness (mm)	105	105
Weight & size	Net weight (kg)	190	230
	Gross weight (kg)	230	280
	Internal W×D×H (mm)	630×440×500	780×580×500
	External W×D×H (mm)	1360×795×1005	1510×935×1005
	Packing W×D×H (mm)	1450×860×1165	1600×1000×1165
	Volume (m <sup>3</sup> )	1.45	1.86

● Basic equipment ○ Optional / Not available