



# -150°C

# Cryogenic Freezer

Model: MDF-150H128

(Version: 2024-5)



## Applications

The -150°C ultra-low temperature freezers are designed for the long-term preservation of viruses, germs, vaccines, biological tissues and organs, special food, medicines, reagents, etc.

## Features

- Accurate temperature controller, setting temperature range is -40 ~ -150°C, accuracy 0.1 °C.
- Suggested ambient temperature: +10~30°C.
- Insulated inner door to ensure good temperature uniformity.
- 304 SS inner chamber for friendly use and easy cleaning.
- Tecumseh compressor to ensure excellent stability of the cooling system.
- Patented refrigeration technology, high-efficiency mixed gas for the cooling system.

## Security

- Safety door lock to prevent unauthorized access.
- Visual and audible alarm system: High/low temperature, sensor failure, controller error.
- Power failure protection: turn-on delay of the cooling system after power failure.
- Controller error protection: the cooling system will remember the normal working cycle and keep working depending on this memory when the controller or two sensors failed.

## Humanized design

- Casters with stoppers for easy moving and fixation.
- Special-designed service-free drainage system.

## Optional parts

- Test hole, Chart recorder, Data logger, Cold storage racks and boxes.



## Specifications

Model NO.	MDF-150-128
Main Specifications	
Temperature Range	-40 ~ -150 °C
Ambient Temperature	10~30°C
Capacity (L/Cu. Ft.)	128 / 4.52
Interior Dimensions (W×D×H) mm	500×450×578
Exterior Dimensions (W×D×H) mm	1560×957×1178
Weight	245 kgs
Noise	55 dB
Storage	
Cold Rack (pcs)	10×1 / 9
2' Cold Box (pcs)	90
0.5~2ml Cryo Vials (pcs)	9,000
Control and Power	
Controller	Microprocessor
Display	7' Touch Screen
Sensor	PT100
Voltage and Frequency	220V~240V, 50Hz
Power	3125 W
Electric Current	14.2 A
Power Consumption (kWh/24h)	38
Audible and Visual Alarms	
High / Low Temp. Alarm	Yes
Sensor Error Alarm	Yes
Controller Error Alarm	Yes
Abnormal Voltage Alarm	Yes
Abnormal Ambient Temp. Alarm	Yes
Filter Net Clean Alarm	Yes
Condenser Error Alarm	Yes
Refrigeration	
Refrigeration Type	Direct Cooling
Defrost	Manual
Compressor (Brand/pcs)	TECUMSEH / 1
Refrigerant / Weight (kgs)	R5001 / 2015g
Cabinet	
Door (pcs)	Foamed Solid Door / 1
Inner Door (pcs)	XPS Plate / 1
Interior Cabinet Material	304 Stainless steel
Exterior Cabinet Material	Coated Steel
Insulation Material	PURF (δ200mm)
Door Lock	Optional
Test Hole (pcs)	Φ25mm / 1
Fixed / Levelling Castors (pcs)	0 / 6
Accessories	
Voltage Stabilizer	Optional
USB Data Download Port	Yes
Remote Alarm Port	Yes
RS232 / RS485 Port	Optional
Temperature Datalogger	Optional
Temperature Chart Recorder	Optional
Protective Gloves	Optional
LN2/CO2 Backup System	Optional

LN2 Filling Tank for Backup System	Optional
Shipping	
Package	Plywood box with pallet
Shipping Weight	340 kgs
Shipping Size (W×D×H)	1637×970×1383
Shipping Volume	2.2 CBM