

# MDF-150H128

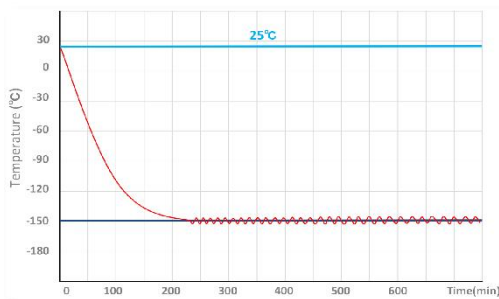
## -150 °C Cryogenic Chest Freezer

220V/380V  
9,000 Samples



**-150°C Cryo-freezer** provides a safe, alternative long term storage solution for custo Cryopreservation refers to the storage of a living organism, tissue at ultra- the same viable state as before it was frozen. | to indefinite amount of time requires samples to be maint below the glass transition temperature of aqueous solu approximately -130°C, longer sublimates and recrystallizati water no zes.

### World-leading refrigeration technology



Pull down times @ ambient 25°C, no load



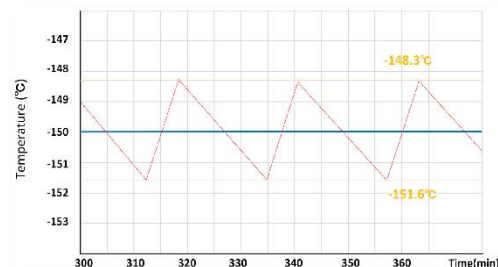
### Super-cooling Technology

Unique refrigeration technology, super fast cooling to -150°C in only 231 minutes (@ambient 25°C 380V/50Hz).



### Super-stable Fluctuation

Precise temperature control provides stable temperature fluctuation between -148.3°C and -151.6°C in the chamber.



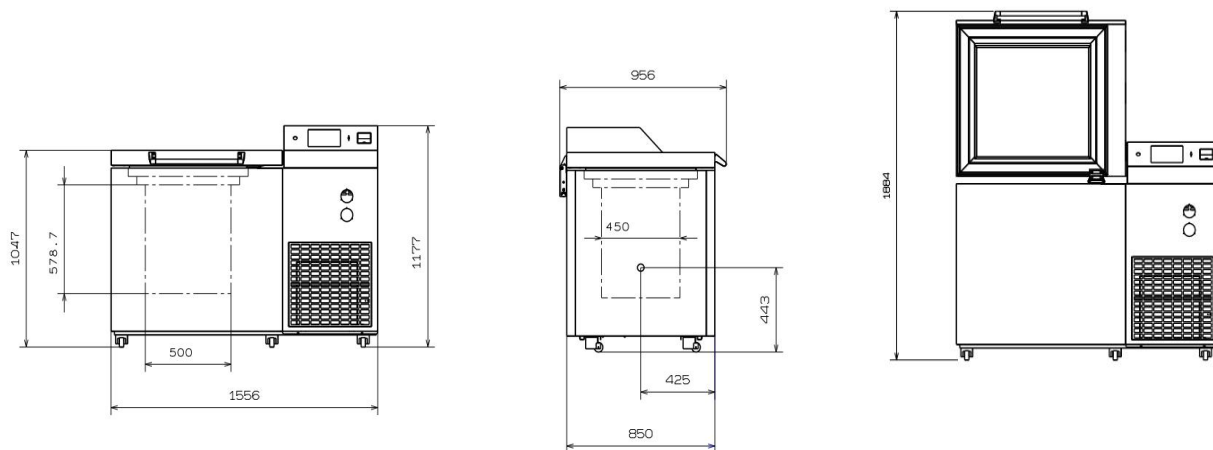
Chamber temperature fluctuation @ ambient 25°C, no load



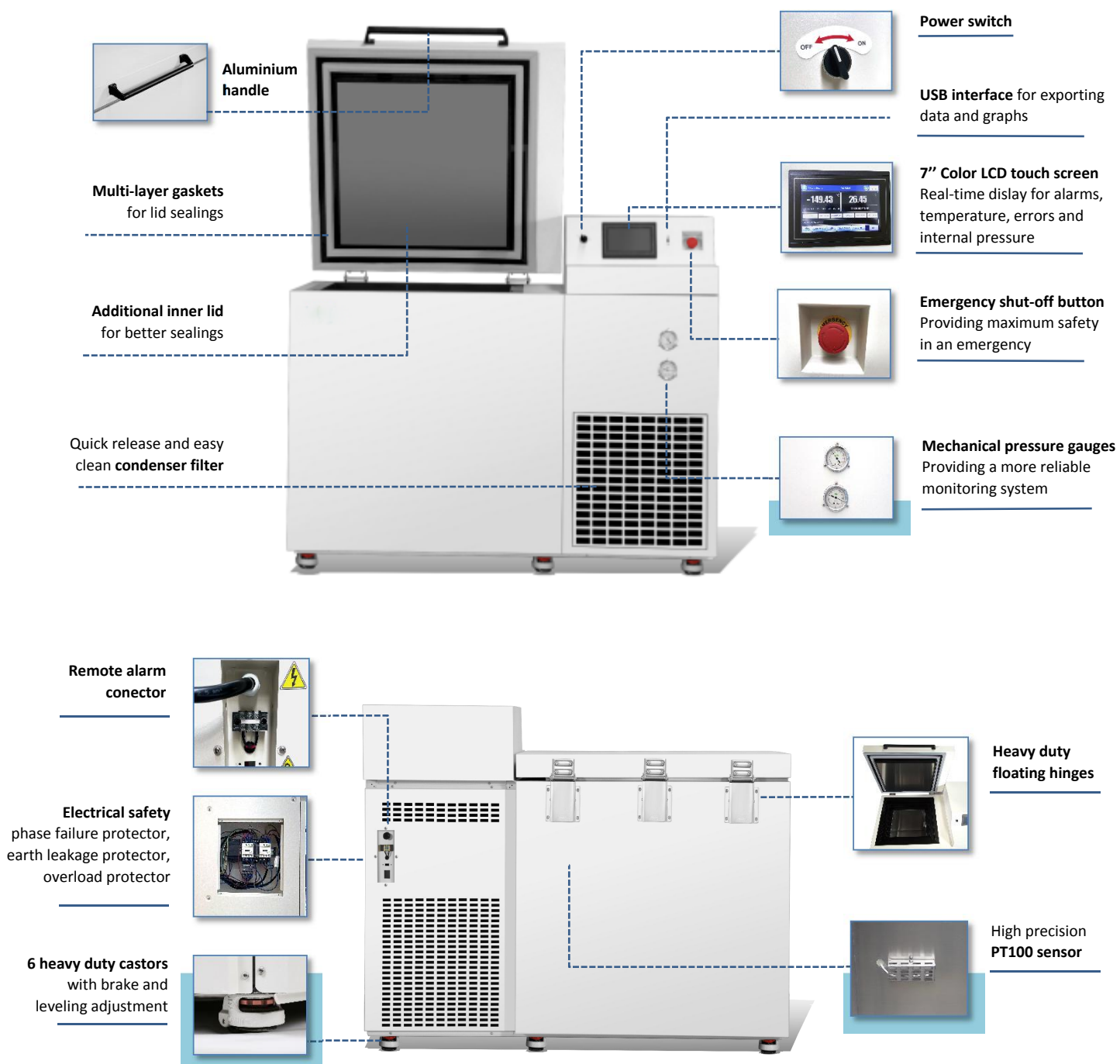
### Excellent Insulations & Sealings

CFC-free high density foaming insulation with 200mm thickness and additional 40mm inner lid minimize the cold loss effectively and lock the cold air inside.

## DIMENSIONS



## PRODUCT STRUCTURE



## FEATURERS



### Color LCD touch screen

Real time display and temperature graphs



### 7 types of alarms

Audible and visual alarms



### Optional power supply

380V 3 phase or 220V single phase for options



### Ultimate electrical safety

Ensuring safer operation for users



### Reliable monitoring system

Real-time monitoring for protecting your samples



### Saving the earth

Efficient cooling system with CFC-free refrigerant but without flammable components



## SPECIFICATIONS

Basic		Refrigeration System		Alarms	
Cooling type	Direct Cooling	Refrigerant	R4001(mxed gas)	High/low temperature	Y
Defrost	Manual	Temp. controller	Microprocessor	Power failure	N/A
Temperature range	-40℃~-150℃	System	Auto-cascade	Abnormal voltage	Y
Ambient temperature	10~30℃	Sensor	PT100	Sensor error	Y
Display	LCD touch screen	Compressor brand/QTY	TECUMSEH/1	Door ajar	N/A
Access port QTY/Dia.	1/25mm	Capacity(L/cu.ft)	128/4.5	Filter screen check	Y
USB Interface	Yes/1	Insulation	PURF	Thermostat failure	Y
Remote alarm Access	RS232/485	Internal material	Foamed SUS304	Low battery	N/A
Outside material	Color sprayed steel	Racks	18	Condenser clean	Y
Inside material	SUS304	Boxes (2 Inches)	90	High ambient temperature	Y
Castor	Universal	Samples(2ml)	9000	Power failure backup (alarm)	72h

Electrical Data		Dimensions		Accessories	
Voltage frequency(V/Hz)	380V/50Hz(220V/50Hz)	Package size(W*D*H)(mm)	1637*970*1383	Racks&box	Optional
Power(W)	2550W	Exterior size(W*D*H)(mm)	1560*957*1178	Data logger	Optional
Current(A)	4.6A	Interior size(W*D*H)(mm)	500*450*578	CO2 back up system	N/A
Power consumption	44.4kWh/24h	Shipping CBM	2.42	LN2 back up system	Optional
Noise(db)	50	N.W/G.W(kg)	303/332	Gloves	Optional