

# MDF-86V728

# -86 °C Ultra Low Temperature Freezer



## METHER CASCADE SYSTEM ULT SERIES

-86°C ULT freezer is specially designed and manufactured for long term storage of various biological products, including viruses, germs, erythrocytes, leucocyte and cutis. Applications can be found in blood banks, hospitals, edipemic prevention service, and research institutes, laboratories in electronic and chemical plants and biological engineering institutes.

## METHER CASCADE SYSTEM



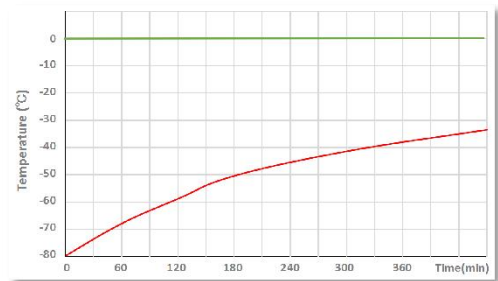
## Super-stable Cooling System

As the most mature ultra-low temperature refrigeration technology in the world, the cascade refrigeration technology has the characteristics of stable performance, easy maintenance and long

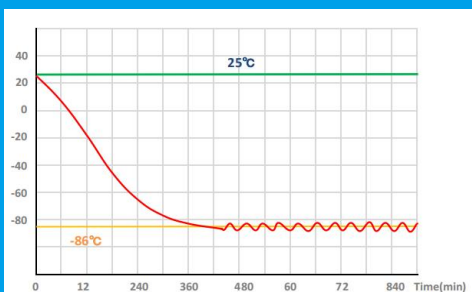


## Advanced thermal insulation

Mether ULTs are designed with the latest generation of VIP technology to achieve thermal conductivity of 0.005 W(m.K). That makes ULTs more efficient in Insulation and less heat loss, so as to achieve the purpose of energy saving as well as space-saving.



Pull up test at ambient temp. 25°C



Pull down test at ambient temp. 25°C



## Fast cooling performance

Cascade Cooling System uses 2-stage refrigeration cycles coupled with each other via heat exchanger to improve the refrigeration effect.

# CONSTRUCTION

## EXTERNAL STRUCTURE



METHER ULT freezers are made of color spayed anti-bacterial and anti-corrosion cold-rolled steel. Various configurations and humanized designs bring great convenience to users.



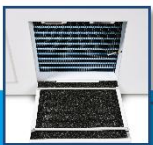
### File box

Easy to place log files



### Ergonomic handle

Easy open  
Lock&keys  
Padlock hole



### Quick-release filter

Easy open & Quick clean



### 7" touch screen

All information display

### Air pressure balance valve



### USB interface

White board



### Heavy duty castors

Universal wheels

### Access port



### Remote interface

RS232/485

### Power on/off



# FEATURES



## 7" LCD touch screen

Easy operation and observation



## Smart Operating System

Authorities, alarms, curve & events



## Multi-layer sealing design

Better sealing, better insulation



## International certifications

ISO9001, ISO13485 & CE verified



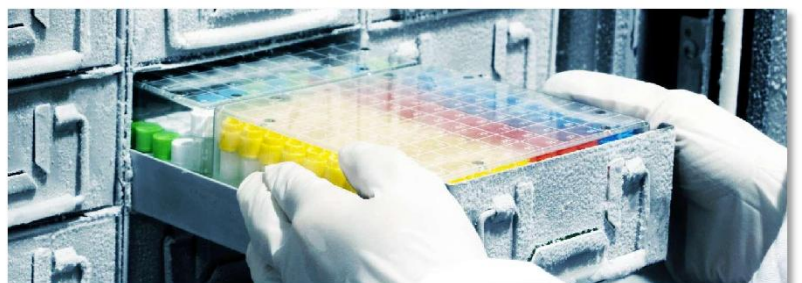
## Eco-friendly

CFC-free refrigerant & insulation



## Energy saving

More efficient cooling system



# CONSTRUCTION



Adjustable shelves



PTC100 probe



Pressure-regulated inner door handle

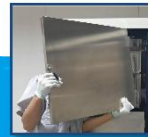


## INTERNAL STRUCTURE

ALL SUS 304 inside



Multi-layer silicone sealing gaskets  
Low temperature resistance



Detachable inner doors



# SPECIFICATIONS

Basic		Refrigeration System		Alarms	
Cooling method	Direct Cooling	Refrigerant	HC	High/low temperature	Y
Defrost	Manual	Temp. controller	Microprocessor	Power failure	Y
Temperature range	-40℃~-86℃	System	Dual system	Abnormal voltage	Y
Ambient temperature	10~32℃	Sensor	PTC100	Sensor error	Y
Display	7" LCD touch screen	Compressor brand/QTY	SECOP/2	Door ajar	Y
Access port QTY/Dia.	1/25mm	Capacity(L/cu.ft)	728/25.70	Filter screen check	Y
USB Access	Y	Insulation	PURF	Thermostat failure	Y
Remote alarm Access	Y	Inner door material/QTY	Foamed SUS304/2	Low battery	Y
Outside material	Color sprayed steel	Racks	18(5x4)+6(6x4)	Condenser clean	Y
Inside material	SUS304	Boxes (2 Inches)	504	High ambient temperature	Y
Castor	Universal	Samples(2ml)	50400	Door ajar	Y
				Power failure backup (alarm)	72h
Electrical Data		Dimensions		Accessories	
Voltage frequency(V/Hz)	220V 50Hz	Package size(W*D*H)(mm)	1320×970×2185	Chart recorder	Optional
Power(W)	935W	Exterior size(W*D*H)(mm)	1248×975×1994.5	Data logger	Optional
Current(A)	8.48A	Interior size(W*D*H)(mm)	963*558*1350	CO2 back up system	Optional
Power consumption	15.99Wh/24h	Shipping CBM	2.8	LN2 back up system	Optional
Noise(db)	53	N.W/G.W(kg)	360/401.5	Gloves	Optional

# ACCESSORIES



LN<sub>2</sub>/CO<sub>2</sub> backup system



Data logger



Chart recorder



Racks & Boxes



Gloves