Design for Biobanking

DUAL SYSTEM

Universities

CDCs

Research institutions and laboratories

Pharmaceutical

Animal husbandry

Deep sea fishery

Vaccine storage

Hospitals

Military industry

Biological engineering
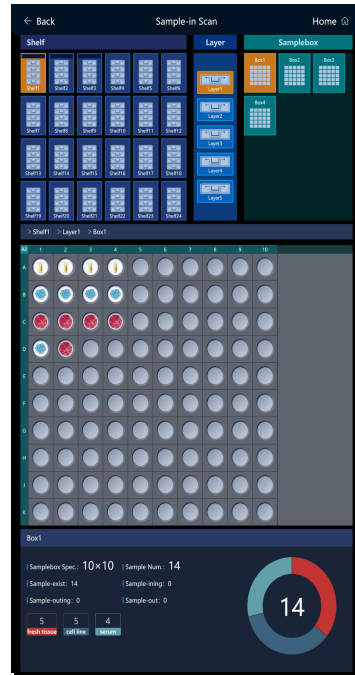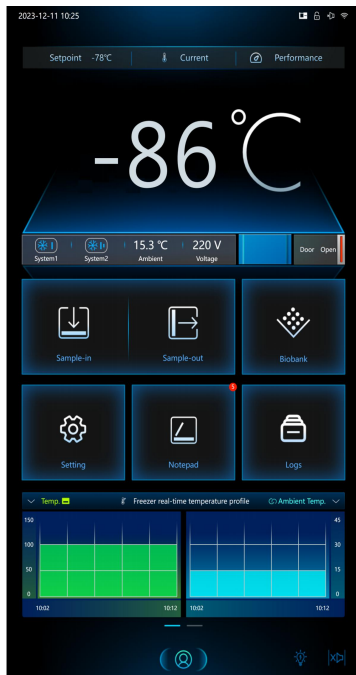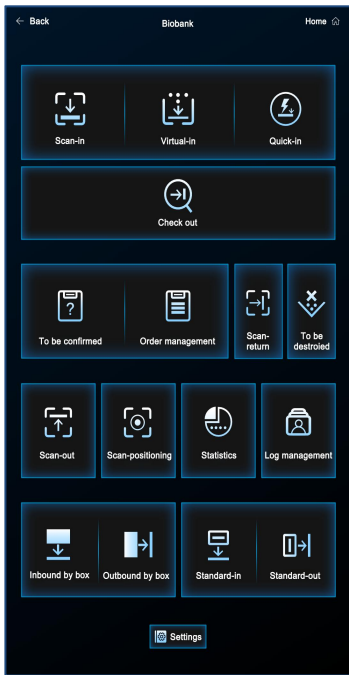
METHER SMART ULT SERIES --Integrated Biobank Management System

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

BIOBANKING SYSTEM

Biobank screen: Scan-in, Virtual-in, Quick-in, Check out, To be confirmed, Order management, Scan-return, To be destroied, Scan-out, Scan-positioning, Statistics, Log management, Inbound by box, Outbound by box, Standard-in, Standard-out, Settings

Main screen: 2023-12-11 10:25, Setpoint -78℃, Current, Performance, -86℃, System1, System2, 15.3℃ Ambient, 220 V Voltage, Door Open, Sample-in, Sample-out, Biobank, Setting, Notepad, Logs, Freezer real-time temperature profile, Ambient Temp.

Sample-in Scan screen: Shelf, Layer, Samplebox, Box1, Samplebox Spec: 10×10, Sample Num: 14, Sample-exist: 14, Sample-ining: 0, Sample-outing: 0, Sample-out: 0, fresh tissue, cell line, serum, 14

Smart Management System
- ·Scan-in and Scan-out management
- ·Easier sample access
- ·Samples are classified

13.3" HD LCD Screen
- · Better human-computer interaction
- · More user-friendly UI for convenient operation

Dual cooling Technology
- · 2 indepentend cooling system provides Max safety for samples
- · Better cooling performance and more energy-saving

EXTERNAL STRUCTURE

13'' touch screen
with biobanking
management system

Ergonomic handle
Easy open
Lock&keys
Padlock hole

Quick-release filter
Easy open & Quick clean

2nd Temp light
Light on all the time

Scanner
USB interface
5V USB Port

Heavy duty castors
Universal wheels

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.

Access port

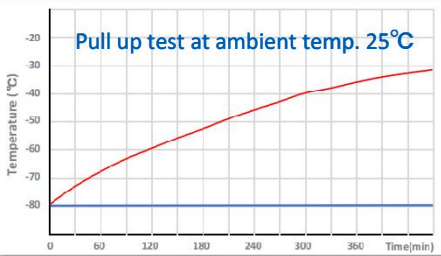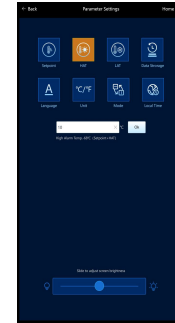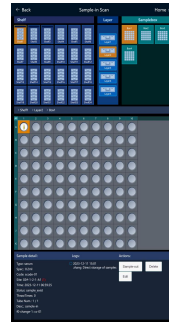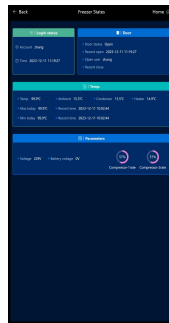**Remote interface**
RS232/485

Power on/off

FEATURERS

13" LCD touch screen
Easy operation and observation

Bio-bank management System
User management, Samples
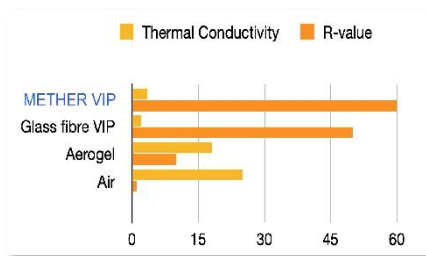
Advanced
Fumed Silicon V.I.P &

Multi-layer
Foamed inner doors with
silicon gaskets

Eco-friendly
CFC-free refrigerant & insulation

Energy saving
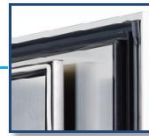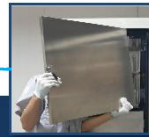More efficient dual cooling system

Pull up test at ambient temp. 25℃

Thermal Conductivity   R-value

METHER VIP
Glass fibre VIP
Aerogel
Air

INTERNAL STRUCTURE

Adjustable shelves

PTC sensor

Pressure-regulated inner door handle

ALL SUS 304 inside

Multi-layer silicone sealing gaskets
Low temperature resistance

SUS 304 inner door filled with PURF
Detachable design

SPECIFICATIONS

Basic		Refrigeration System		Alarms	
Cooling method	Direct Cooling	Refrigerant	R4001 (mixed gas)	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	PTC	Sensor error	Y
Display	13'' LCD touch screen	Compressor brand/QTY	SECOP/2	Door ajar	Y
Access port QTY/Dia.	2/25mm	Capacity(L/cu.ft)	600/21.18	Filter screen check	Y
USB Access	Y	Insulation	PURF+VIP	Thermostat failure	Y
Remote alarm Access	RS232/485	Inner door material/QTY	Foamed SUS304/2	Low battery	Y
Outside material	Color sprayed steel	Racks	16(5X5)	Condenser clean	Y
Inside material	SUS304	Boxes (2 Inches)	400	High ambient temperature	Y
Castor	Universal	Samples(2ml)	40,000	Door ajar	Y
				Power failure backup (alarm)	72h

Electrical Data		Dimensions		Accessories	
Voltage frequency(V/Hz)	220V 50Hz/60Hz	Package size(W*D*H)(mm)	970*1190*2200	Chart recorder	Optional
Power(W)	1500W	Exterior size(W*D*H)(mm)	891*1130*1994.5	Data logger	Optional
Current(A)	10.37A	Interior size(W*D*H)(mm)	608*740*1310	CO2 back up system	Optional
Power consumption	16.23Wh/24h	Shipping CBM	2.45	LN2 back up system	Optional
Noise(db)	53	N.W/G.W(kg)	315/380	Gloves	Optional

ACCESSORIES

LN₂/CO₂ backup system

Data logger

Chart recorder

Racks & Boxes

Gloves