CE · ISO9001 CERTIFIED · ISO13485 CERTIFIED · ISO14001 CERTIFIED · ISO45001 CERTIFIED

838 liters 60,000 samples

Universities · Animal husbandry · Research institutions and laboratories · CDCs · Pharmaceutical · Deep sea fishery · Vaccine storage · Hospitals · Military industry · Biological engineering

## AUTO-CASCADE SYSTEM SERIES

-86℃ 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.

## AUTO-CASCADE SYSTEM
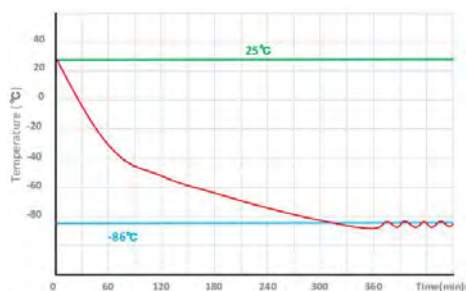


Pull down test at ambient temp.

### ❄ Super-cooling technology

The powerful cooling system drives the unique mixed refrigeration system for fast cooling down. This system is stable, energy saving and easy maintenance
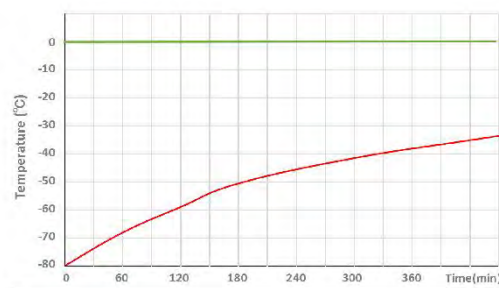
### ❄ Advanced thermal insulation

The 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℃

58 -838 liters 2,400-60,000 samples

MDF-86V588E    MDF-86V728E    MDF-86V838E    MDF-86V408E    MDF-86V340E    MDF-86V188E    MDF-86V58
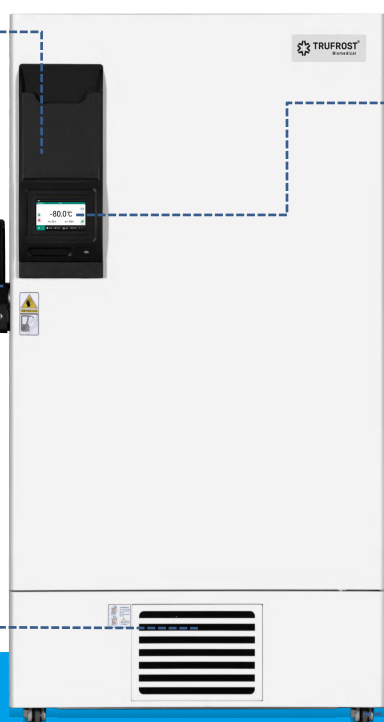
# EXTERNAL STRUCTURE

**File box**
Easy to place log files
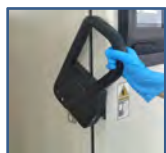
**Ergonomic handle**
Easy open
Lock&keys
Padlock hole

**Quick-release filter**
Easy open & Quick clean

**7'' touch screen**
**Vacuum release port**
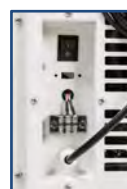**USB data logger**

**Heavy duty castors**
Universal wheels

The 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**

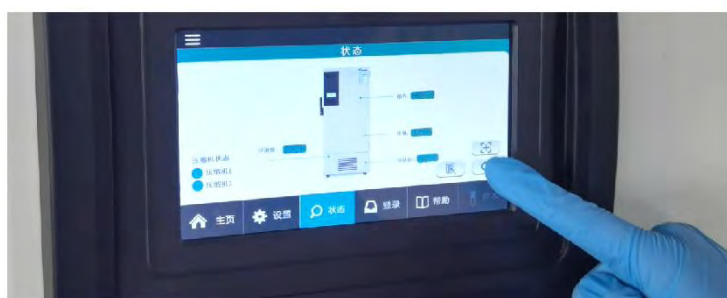**Remote interface**
RS232/485

**USB interface**
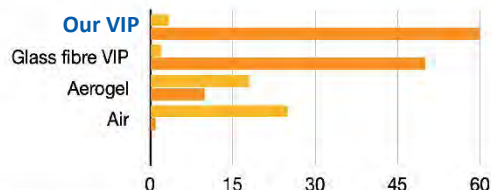**Power on/off**

# FEATURERS

**7'' LCD touch screen**
Easy operation and observation

**Smart Operating System**
Authorities, alarms, curve & events

**Advanced insulation tech**
Fumed Silicon V.I.P & PURF

**Multi-layer sealing**
Foamed inner doors with silicon

**Eco-friendly**
CFC-free refrigerant & insulation

**Energy saving**
More efficient cooling system

# 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°C~-86°C | System | Auto-cascade | Abnormal voltage | Y |
| Ambient temperature | 10~32℃ | Sensor | PTC | Sensor error | Y |
| Display | LED digital | Compressor brand/QTY | SECOP/2 | Door ajar | Y |
| Access port QTY/Dia. | 1/25mm | Capacity(L/cu.ft) | 838/29.59 | Filter screen check | Y |
| USB Intereface | Yes/1 | 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 | 24(5X5) Optional | Condenser clean | Y |
| Inside material | SUS304 | Boxes (2 Inches) | 600 | High ambient temperature | Y |
| Castor | Universal | Samples(2ml) | 60000 | Power failure backup (alarm) | 72h |

| Electrical Data | | Dimensions | | Accessories | |
|---|---|---|---|---|---|
| Voltage frequency(V/Hz) | 220V 50Hz/60Hz | Package size(W*D*H)(mm) | 1270*1100*2185 | Chart recorder | Optional |
| Power(W) | 1700W | Exterior size(W*D*H)(mm) | 1160*1172*1994.5 | Data logger | Optional |
| Current(A) | 10.75A | Interior size(W*D*H)(mm) | 894*718*1310 | CO2 back up system | Optional |
| Power consumption | 14.00KWh/24h | Shipping CBM | 3.05 | LN2 back up system | Optional |
| Noise(db) | 55 | N.W/G.W(kg) | 391/424 | Gloves | Optional |

# ACCESSORIES

**LN₂/CO₂ backup system**

**Data logger**
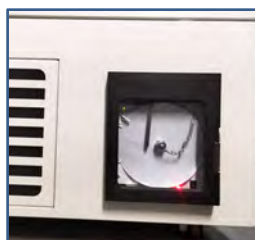
**Chart recorder**

**Racks & Boxes**

**Gloves**