

# YR05108

## -86°C Ultra Low Temperature Freezer



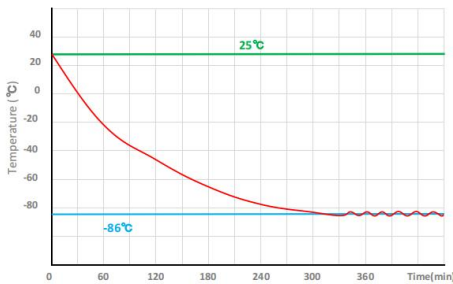
340 liters  
19,200 samples



### KALSTEIN AUTO-CASCADE SYSTEM 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.

### KALSTEIN AUTO-CASCADE SYSTEM



Pull down test at ambient temp.



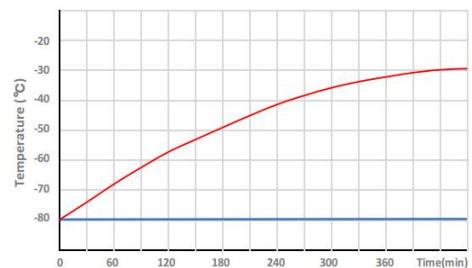
### Advanced thermal insulation

The insulation 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.



### 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.



Pull up test at ambient temp. 25°C



YR05109

YR05110

YR05111

YR05108

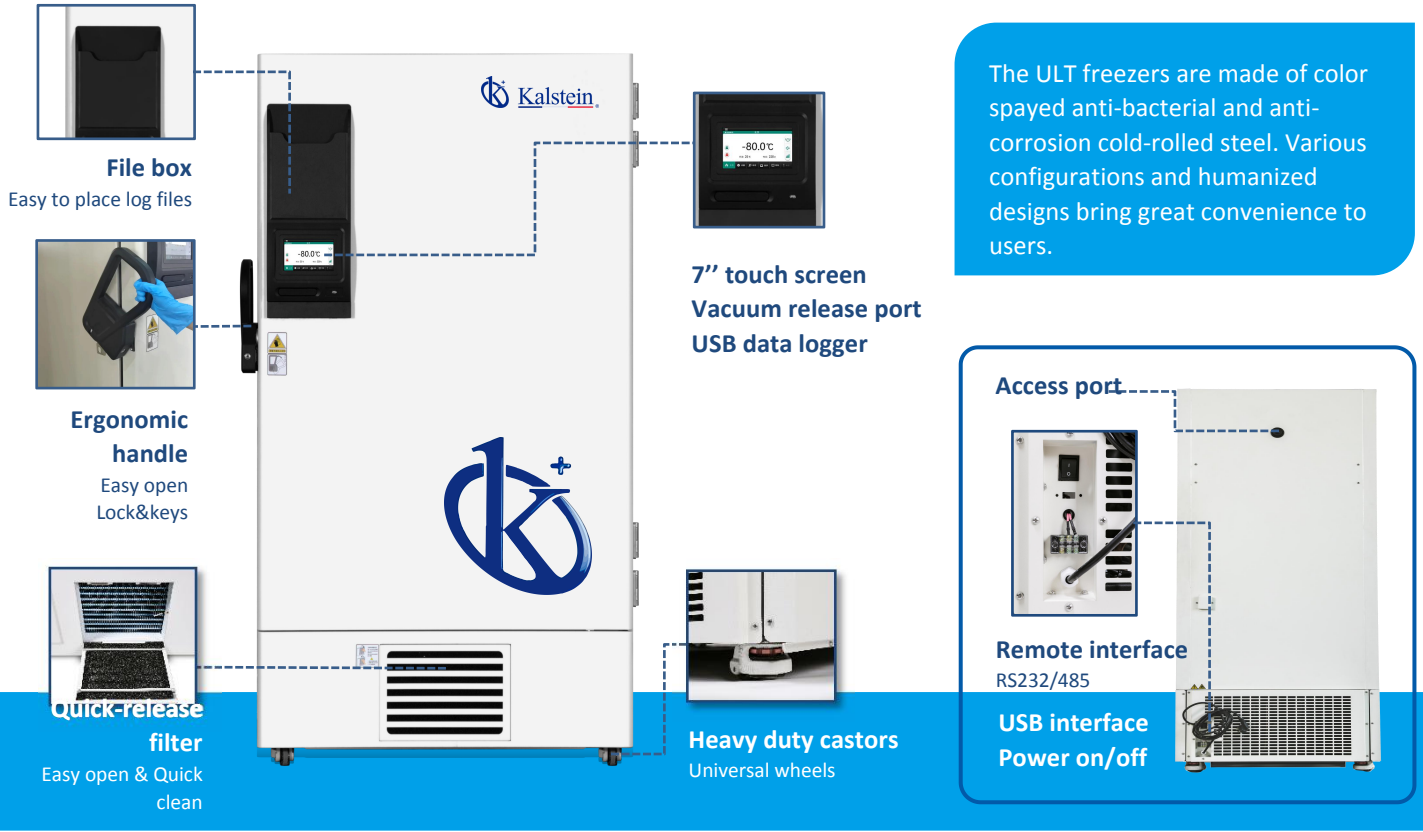
YR05108A

YR05107

YR05106

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

# EXTERNAL STRUCTURE



**File box**  
Easy to place log files

**Ergonomic handle**  
Easy open  
Lock&keys

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

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

**Heavy duty castors**  
Universal wheels

**Access port**

**Remote interface**  
RS232/485

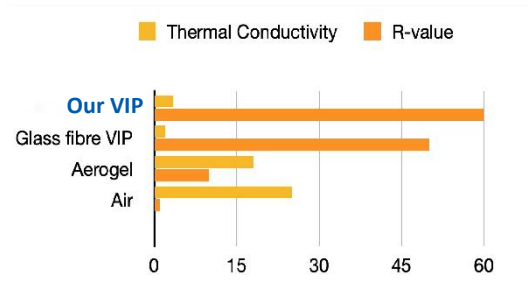
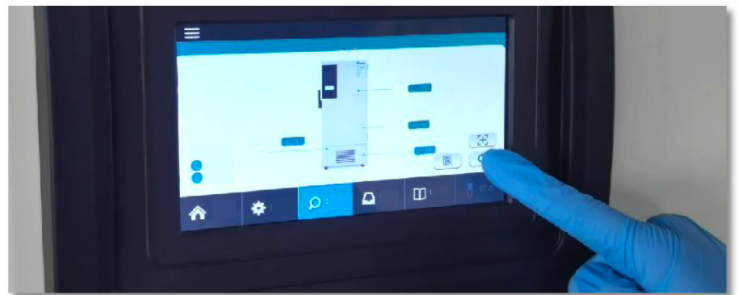
**USB interface**  
Power on/off

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

# FEATURERS

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

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

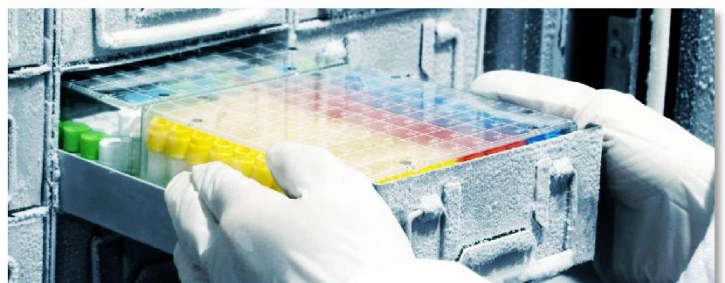


 **Advanced insulation**  
Fumed Silicon V.I.P & PURF

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

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

 **Energy saving**  
More efficient cooling system



# INTERNAL STRUCTURE



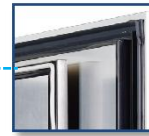
Adjustable shelves



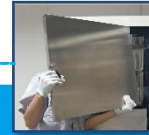
PTC sensor



Pressure-regulated inner door handle



Multi-layer silicone sealing gaskets  
Low temperature resistance



SUS 304 inner door filled with PURF  
Detachable design

ALL  
SUS 304  
inside



# 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°C             | Sensor                  | PTC 100          | Sensor error                 | Y   |
| Display              | LED digital         | Compressor brand/QTY    | SECOP/2          | Door ajar                    | Y   |
| Access port QTY/Dia. | 1/25mm              | Capacity(L/cu.ft)       | 408/14.40        | 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                   | 8(5X4)+8(4X4)    | Condenser clean              | Y   |
| Inside material      | SUS304              | Boxes (2 Inches)        | 288              | High ambient temperature     | Y   |
| Castor               | Universal           | Samples                 | 28,800           | Power failure backup (alarm) | 72h |

| Electrical Data         |                | Dimensions               |                 | Accessories        |          |
|-------------------------|----------------|--------------------------|-----------------|--------------------|----------|
| Voltage frequency(V/Hz) | 220V 50Hz/60Hz | Package size(W*D*H)(mm)  | 954*955*2094    | Chart recorder     | Optional |
| Power(W)                | 890W           | Exterior size(W*D*H)(mm) | 872*1028*1945.5 | Data logger        | Optional |
| Current(A)              | 5.34A          | Interior size(W*D*H)(mm) | 606*575*1180    | CO2 back up system | Optional |
| Power consumption       | 12.82KWh/24h   | Shipping CBM             | 1.92            | LN2 back up system | Optional |
| Noise(db)               | 53             | N.W/G.W(kg)              | 268/293         | Gloves             | Optional |

# ACCESSORIES



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



Data logger



Chart recorder



Racks & Boxes



Gloves