

Better Science Better Life

We are

MELING BIOMEDICAL, a subsidiary division of Changhong Meiling Group. The group commit to better life since 1956. Our company is a joint venture which was founded in 2002 by Hefei Meiling Co., Ltd. and Chinese Academy of Sciences.

Zhongke Meiling Cryogenics Company Limited

No 1862 Zishi Road, HeFei City, AnHui ,P.R.China
Tel:+86 551 64317378 Fax:+86 551 62219667
www.melingbiomedical.com
overseas.marketing@zkmeiling.com
zkmeiling@zkmeiling.com

 www.linkedin.com/Melingbiomedical
 www.youtube.com/Melingbiomedical
 www.twitter.com/Melingbiomedical
 www.instagram.com/Melingbiomedical
 web.whatsapp.com/Melingbiomedical

MELING
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Product Catalogue



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About Meling

MELING BIOMEDICAL, as a national new high-tech enterprise and a joint venture of Hefei Meiling Co.,Ltd.and Chinese Academy of Sciences, was founded in 2002 and located in Hefei Economic Development Zone.

We offer variety of product lines including medical & pharmacy refrigerator, ultra-low temperature freezer, blood bank refrigerator, explosion proof refrigerator, freezer rack & box, cold room, and bio-bank management system. Thanks to the professional sales team and good after-sales services, now Meling covers 2800 counties, 300 cities and total 30 provinces in domestic market. With the international certifications such as ISO & CE & UL, we are dedicated to offering quality products to our business partners including Europe, America, Asia, MENA, for medical systems, blood bank systems, health systems, universities, researches & development institutions, biological medicine factories, gene engineering and life sciences from more than 70 countries. We have 5,000 m² R&D center and 85,000m² workshop which is equipped with global cutting-edge automatic production lines as well as professional ultra-low temperature test center. With more than 30 years development in the refrigeration industry, we have built up our superior team and obtained kinds of patents, especially Mixed Refrigerants which has won the second prize of State Technological Invention Award and the first prize of Chinese Association of Refrigeration.



-164°C/-150°C Cryogenic Freezer

New Upgraded World's Coldest Freezer



-  Targeted Refrigeration
-  Low Temperature Limit
-  Innovator in Refrigeration Industry
-  National Awards

Structure

- The external material is cold rolled steel plate , and the internal material is stainless steel. Both are corrosion resistant and easy to clean;
- There is an Φ40mm access port on the left side of the freezer, convenient to monitor /test/ back-up equipment;
- The freezer adopts 102.5mm foam outer door, with 3 thermal insulation boards on the top, which effectively prevents the loss of cold air and has good thermal insulation performance;
- The freezer is equipped with a door lock to prevent unauthorized opening and provide safe storage space for samples;
- The freezer is equipped with 6 universal wheels for easy movement.

Control system

- The microprocessor controller can display temperature in 0.1°C increments;
- The cabinet is equipped with a high-sensitivity temperature sensor to ensure constant internal temperature;
- The freezer is equipped with audible and visible alarm system (High temperature alarm, Low temperature alarm, Sensor failure alarm, Power failure alarm, Low battery alarm, Communication failure alarm, High ambient temperature alarm, Condenser high temperature alarm) to make its storage safer.

Refrigeration system

- The freezer uses industrial compressor, which has fast refrigeration speed and good stability. ;
- CFC-free refrigerant, environmental protection and low pollution.

✓ Scope of Application

Application to scientific research, low temperature test of special materials, freeze red blood cell, white blood cell, skins, DNA/RNA, bones, bacteria,sperm and biological products etc. Suitable for use in blood bank station, hospitals, sanitation and anti-epidemic stations, biological engineering, laboratories in colleges & universities, military enterprises and so on.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Power Supply (V/Hz) | Freezer Rack (Model & Quantity) | Net Weight (Kg) |
|----------|----------------------|-----------------|---------------------------------|---------------------------------|---------------------|---------------------------------|-----------------|
| DW-UW128 | 128 | -110~-150 | 1665*1000*1115 | 510*460*540 | 380/50 | ZKW304-9-2 : 9 | 390 |
| DW-UW258 | 258 | -110~-150 | 2250*940*1120 | 1140*410*552 | 380/50 | ZKW304-9-2 : 16 | 435 |

-86°C Ultra-low Temperature Freezer

Android Screen Ultra-low Temperature Freezer



Structure Design

- Vacuum insulation panels allow for increased internal capacity with the same footprint as traditionally foamed freezers, as well as it ensures excellent temperature stability;
- Ergonomic door handle located at waist level is needed to open and close the freezer door, meanwhile equipped with vacuum vent with plunger to gain immediate access to your freezer;
- Inner doors are gasketed as well as insulated creating separate compartments minimizing cold loss while you access your samples;
- Equipped with \varnothing 25mm access port, convenient to monitor /test/ back-up system;
- Equipped with four heavy duty casters for ease of moving.

Electronic Control

- Multiple audible and visible alarm system;
- RS485 interface compliance to MODEBUS protocol is able to transfer data with BMS console;
- Optional for CO2 backup system for extra security for your valuable samples;
- The intelligent touch screen provides a convenient and simple man-machine interactive mode. With its own storage space, it can store up to 10 years of data records.

Refrigeration Performance

- Direct cooling circulation technology with coil evaporator maintains a uniform temperature throughout the chamber;
- SECOP compressor maintain a reliable -86°C ultra low temperature environment, that increases efficient sample storage;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption.[Comply to SNAP No. 22 Rule].

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Freezer Rack (Model & Quantity) | Net Weight (Kg) |
|-----------------|----------------------|-----------------|---------------------------------|---------------------------------|---|-----------------|
| DW-HL398/SA/HC | 398 | -40~-86 | 785*1041*1947 | 440*696*1266 | ZKL304-552B-CT : 12 | 237/247 |
| DW-HL528/SA/HC | 528 | -40~-86 | 930*1041*1947 | 585*696*1266 | ZKL304-552B-CT : 16 | 286/296 |
| DW-HL678/SA/HC | 678 | -40~-86 | 1090*1025*1955 | 750*696*1286 | ZKL304-552B-CT : 20 | 330/330 |
| DW-HL778/SA/HC | 778 | -40~-86 | 1205*1025*1955 | 865*696*1286 | ZKL304-552B-CT : 24 | 365/365 |
| DW-HL858/SA/HC | 858 | -40~-86 | 1217*1025*1994 | 877*696*1378 | ZKL304-552B-CT : 12+ ZKL304-652B-CT : 12 | 390/390 |
| DW-HL1008/SA/HC | 1008 | -40~-86 | 1362*1025*1994 | 1022*696*1378 | ZKL304-552B-CT : 14+ ZKL304-652B-CT : 14 | 426/426 |

-86°C Ultra-low Temperature Freezer

Cost-efficient Ultra-low Temperature Freezer



Structure Design

- Ergonomic door handle located at waist level is needed to open and close the freezer door, meanwhile equipped with vacuum vent with plunger to gain immediate access to your freezer;
- Vacuum insulation panels allow for increased internal capacity with the same footprint as traditionally foamed freezers, as well as it ensures excellent temperature stability;
- Inner doors are gasketed as well as insulated creating separate compartments minimizing cold loss while you access your samples;
- One access port, convenient to monitor /test/ back-up system;
- Equipped with four heavy duty casters for ease of moving.

Electronic Control

- Audible and visible alarm system, multiple alarms including high temperature alarm, low temperature alarm, power failure alarm, low battery alarm, sensor failure alarm, door ajar alarm, high ambient temperature alarm, communication failure alarm, battery power detection failure alarm and condenser overheating alarm etc;
- The digital screen provides storage space, it can store up to 100,000 sets of data records;
- RS485 interface compliance to MODEBUS protocol is able to transfer data with BMS console;
- Optional for CO2 backup system for extra security for your valuable samples.

Refrigeration Performance

- Direct cooling circulation technology with coil evaporator maintains a uniform temperature throughout the chamber;
- SECOP compressor maintain a reliable -86°C ultra low temperature environment, that increases efficient sample storage.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Freezer Rack (Model & Quantity) | Net Weight (Kg) |
|------------|----------------------|-----------------|---------------------------------|---------------------------------|---------------------------------------|-----------------|
| DW-HL100HC | 100 | -40~-86 | 1066*742*820 | 450*450*514 | ZKL304-432B-CT : 3+ZKL304-332B-CT : 3 | 145 |
| DW-HL218HC | 218 | -40~-86 | 862*976*1555 | 470*582*768 | ZKL304-542B-CT : 3+ZKL304-642B-CT : 3 | 218 |
| DW-HL340 | 340 | -40~-86 | 755*895*1982 | 470*578*1250 | ZKL304-542B-CT : 9+ZKL304-432B-CT : 3 | 208 |

-86°C Ultra-low Temperature Freezer

· Chest Series · Intelligent Cooling · Speed Cooling · Energy Saving



DW-HW50HC

Structure Design

- User-friendly ergonomic design;
- Vacuum insulation panels for space-saving;
- Multiple separate compartments;
- One of Φ 25mm access port, convenient to monitor /test/ back-up system;
- Equipped with four heavy duty casters for ease of moving.

Electronic Control

- Multiple audible and visible alarm system;
- The digital screen provides storage space, it can store up to 100,000 sets of data records;
- RS485 interface compliance to MODEBUS protocol is able to transfer data with BMS console;
- Optional for CO2 backup system for extra security for your valuable samples.

Refrigeration Performance

- Direct cooling circulation technology with coil evaporator maintains a uniform temperature throughout the chamber;
- SECOP compressor maintain a reliable -86°C ultra low temperature environment, that increases efficient sample storage;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption.[Comply to SNAP No. 22 Rule].



DW-HW138

High-precision Temperature Control

- Digital temperature display, display the chamber temperature, power supply voltage, ambient temperature and other parameters, etc. The running status is clearly displayed;
- High-precision microcomputer temperature control system and platinum resistor temperature sensors enable users to set temperature inside the cabinet within a range from -40 ~ -86°C.

Refrigeration System

- The imported high-efficiency compressor and EBM fan are energy-saving and highly efficient;
- 152mm foaming insulation with VIP board for better temperature performance.

Security System

- The well-developed security system with multiple audible & visual alarm functions: high&low temperature, door ajar, power failure, sensor failure, low battery, condenser overheated alarm, system failure;
- The compressor start delay and stopping interval protection can ensure reliable operation;
- The keyboard lock function and password protection function can prevent any adjustment of operating parameters without permission;
- Long time support back-up battery for display and alarms system during power failure for supportive safety notification.

Human-oriented Design

- The door with new-type assisting handle can be opened easily;
- SUS304 interior, low temperature resistance and corrosion resistance, easier cleaning;
- Universal caster with brake, easy for movement and fixation.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Freezer Rack (Model & Quantity) | Net Weight (Kg) |
|-----------|----------------------|-----------------|---------------------------------|---------------------------------|---------------------------------|-----------------|
| DW-HW50HC | 50 | -40~-86 | 650*606*1080 | 430*305*425 | ZKW-304-7-2 : 6 | 74 |
| DW-HW138 | 138 | -40~-86 | 1328*890*1025 | 490*470*582 | ZKW304-10-2 : 9 | 200 |
| DW-HW328 | 328 | -40~-86 | 2038*890*1025 | 1200*470*582 | ZKW304-10-2 : 24 | 280 |
| DW-HW668 | 668 | -40~-86 | 2008*1180*1041 | 1200*815*666 | ZKW304-10-2 : 40 | 352 |

-86°C Ultra-low Temperature Freezer

Undercounter Freezer



DW-HL50HC

Structure Design

- Ergonomic door handle located at waist level is needed to open and close the freezer door, meanwhile equipped with vacuum vent with plunger to gain immediate access to your freezer.
- Vacuum insulation panels allow for increased internal capacity with the same footprint as traditionally foamed freezers, as well as it ensures excellent temperature stability.
- Inner doors are gasketed as well as insulated creating 2 separate compartments minimizing cold loss while you access your samples.
- One of Φ 25mm access port, convenient to monitor /test/ back-up system.
- Equipped with four heavy duty casters for ease of moving.

Electronic Control

- Well-developed Audible & Visible Alarm System;
- The digital screen provides storage space, it can store up to 100,000 sets of data records;
- RS485 interface compliance to MODEBUS protocol is able to transfer data with BMS console;
- Optional for CO2 backup system for extra security for your valuable samples.

Refrigeration Performance

- Direct cooling circulation technology with coil evaporator maintains a uniform temperature throughout the chamber;
- SECOP compressor maintain a reliable -86°C ultra low temperature environment, that increases efficient sample storage;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption.[Comply to SNAP No. 22 Rule]

-86°C Portable Ultra-low Temperature Freezer



DW-HL1.8

Intelligent temperature control

- High definition digital display with the display accuracy reaching 0.1°C;
- The inner temperature can be set from -40 °C to -86 °C.

Refrigeration System

- New Smart refrigeration design with energy-efficient CFC-free refrigerant;
- Portable design which can both use 24V vehicle power supply and 220V household power supply;
- The foaming body and accessory device for heat preservation use soft EVA blind hole foaming materials for better cooling performance.

Refrigeration system

- With multiple security alarms including high temperature alarm, low temperature alarm, sensor fault alarm, power outage alarm which can preserve samples in a safer way;
- The protection of power-on delay and power-off interval ensure the safety operation;
- Keyboard with lockout system and keyword protection prevent from adjusting operation parameters without permission;
- The double-locking design makes sure the safety for sample storage.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|-----------|----------------------|-----------------|---------------------------------|---------------------------------|-----------------|
| DW-HL50HC | 50 | -40~-86 | 951*700*757 | 305*425*430 | 104 |
| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
| DW-HL1.8 | 1.8 | -40~-86 | 245*282*496 | 150*150*87 | 11 |

-40°C Ultra-low Temperature Freezer



Structure Design

- The freezer is equipped with a foam door, which effectively prevents the loss of cold air and has excellent insulation performance;
- The door is equipped with a lock and key to provide a safe cryogenic storage space for samples;
- There is Φ25mm access port on the left side of the freezer, convenient to monitor /test/ back-up equipment;
- Equipped universal wheels and leveling feet for easy movement and fixation.

Control system

- Well-developed Audible & Visible Alarm System;
- The equipped built-in data-logger can export up to 12 months of temperature data (that has not been exported) through USB port, either automatically or manually;
- The RS485 interface is capable of defining and transferring critical temperature data of the equipment by the MODBUS protocol;
- The microprocessor controller can display temperature in 0.1°C increments;
- The cabinet is equipped with a high-sensitivity temperature sensor to ensure constant internal temperature.

Refrigeration system

- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption.[Comply to SNAP No. 22 Rule];
- Industrial compressor realizes energy conservation and environmental protection.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|----------|----------------------|-----------------|---------------------------------|---------------------------------|-----------------|
| DW-FL90 | 90 | -20~-40 | 700*669*854 | 500*485*532 | 54 |
| DW-FL270 | 270 | -20~-40 | 700*640*1792 | 500*460*1235 | 90 |
| DW-FL450 | 450 | -20~-40 | 810*735*1960 | (650*570*627)*2 | 144 |
| DW-FL528 | 528 | -20~-40 | 930*1041*1947 | 585*696*1266 | 234 |

-40°C Ultra-low Temperature Freezer

Can be upgraded to -60°C Ultra-low Temperature Freezer



Structure Design

- The freezer is equipped with a foam door, which effectively prevents the loss of cold air and has excellent insulation performance;
- The door is equipped with a lock and key to provide a safe cryogenic storage space for samples;
- The external material is cold rolled steel sheet, and the internal material is stainless steel . Both are corrosion resistant and easy to clean;
- This freezer has a steel wire basket, which is convenient for sample access;
- Equipped with universal wheels for easy movement.

Control system

- The freezer is equipped with high temperature alarm, low temperature alarm ,power failure alarm ,low battery alarm and sensor failure alarm to make it safer for storage.

Refrigeration system

- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption.[Comply to SNAP No. 22 Rule];
- Industrial compressor realizes energy conservation and environmental protection.

✓ Scope of Application

Suitable for use in scientific research, cryogenic test on special materials, blood plasma cryopreservation, low temperature resistance test on biological materials, vaccines, biological products and military products, etc. Suitable for use in research institutions, the electronic industry, the chemical industry, hospitals, the health & disease prevention system, laboratories in colleges & universities, military enterprises, etc.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|----------|----------------------|-----------------|---------------------------------|---------------------------------|-----------------|
| DW-FW150 | 150 | -20~-40 | 811*775*929 | 585*465*651 | 60 |
| DW-FW270 | 270 | -20~-40 | 1245*775*929 | 1019*465*651 | 77 |
| DW-FW360 | 360 | -20~-40 | 1534*775*929 | 1308*465*651 | 98 |

-10~-25°C Biomedical Freezer



DW-YL270



DW-YL450



DW-YL90



DW-YW508A

Structure Design

- The freezer is equipped with a foam door, which effectively prevents the loss of cold air and has excellent insulation performance;
- The door is equipped with a lock and key to provide a safe cryogenic storage space for samples;
- The freezer cabinet is made of pre-coated steel plate, which is corrosion resistant and easy to clean;
- There is $\Phi 25\text{mm}$ access port on the left side of the freezer, convenient to monitor /test/ back-up equipment;
- Upright freezer has ABS drawers, chest freezer has baskets, which are convenient for sample access;
- Equipped universal wheels and leveling feet for easy movement and fixation.

Control system

- Well-developed Audible & Visible Alarm System;
- The equipped built-in data-logger can export up to 12 months of temperature data (that has not been exported) through USB port, either automatically or manually;
- The RS485 interface is capable of defining and transferring critical temperature data of the equipment by the MODBUS protocol;
- The microprocessor controller can display temperature in 0.1°C increments;
- The cabinet is equipped with a high-sensitivity temperature sensor to ensure constant internal temperature.

Refrigeration system

- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption. [Comply to SNAP No. 22 Rule];
- Industrial compressor with HC refrigerant realizes energy conservation and environmental protection.

| Model | Effective Volume (L) | Temperature($^\circ\text{C}$) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|-----------|----------------------|---------------------------------|---------------------------------|---------------------------------|-----------------|
| DW-YL90 | 90 | -10~-25 | 700*669*854 | 500*485*532 | 54 |
| DW-YL270 | 270 | -10~-25 | 700*640*1792 | 500*460*1235 | 90 |
| DW-YL450 | 450 | -10~-25 | 810*735*1960 | (650*570*627)*2 | 136 |
| DW-YW226A | 226 | -10~-25 | 1115*610*890 | 954*410*703 | 50 |
| DW-YW358A | 358 | -10~-25 | 1350*785*880 | 1220*545*673 | 59 |
| DW-YW508A | 508 | -10~-25 | 1650*735*880 | 1504*545*673 | 74 |

2~8/-10~-26/-40°C Combined Refrigerator and Freezer



YCD-EL300



YCD-FL289



YCD-EL450



YCD-FL519

Structure Design

- The upper chamber is double glass with low-E, it has electric heating function to prevent condensation; and the lower chamber is solid, it has great insulation function;
- It is equipped with 2 compressors and 2 independent displays, respectively control the upper refrigerator and the lower freezer;
- Clear visibility inside the refrigerator compartment is provided by LED light, which are automatically turned on once the door is opened;
- Two access ports ($\Phi 25\text{mm}$) are convenient to connect monitoring /testing/ back-up device;
- The freezer has the plastic coated wire steel shelves and the ABS drawers in the chamber, which are convenient for taking samples;
- 4 universal wheels+2 casters with brake at the bottom, easy to move and place.

Control system

- Audible and visible alarm system, multiple alarms including high temperature alarm, low temperature alarm, sensor failure etc;
- Microprocessor controller can display temperature in 0.1°C increments to make sure the temperature inside stable.

Refrigeration system

- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption. [Comply to SNAP No. 22 Rule].

| Model | Effective Volume (L) | Temperature($^\circ\text{C}$) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|-----------|----------------------|---------------------------------|---------------------------------|---------------------------------|-----------------|
| YCD-EL300 | 300 | R:2~8/F:-10~-26 | 700*640*1876 | R:600*510*657/F:500*460*535 | 87 |
| YCD-FL289 | 289 | R:2~8/F:-10~-40 | 700*640*1845 | R:600*510*710/F:500*460*505 | 143 |
| YCD-EL450 | 450 | R:2~8/F:-10~-26 | 810*735*1960 | (650*570*627)*2 | 144 |
| YCD-FL519 | 519 | R:2~8/F:-10~-40 | 910*740*1972 | R:750*610*740/F:650*560*565 | 186 |

2~8°C Pharmacy Refrigerator

Real Air Cooling

Air circulation with finned evaporator achieves fast cooling and ensures temperature uniformity in the cabinet.

Real Energy Saving

Industrial compressor with hydrocarbon refrigerant realizes energy conservation and environmental protection.

Real Visibility

Double-pane glass door with electric heating function can against condensation at 16-32 °C ambient temperature.

Real Safety

The standard remote alarm contact allows users to obtain alarm information in time even when they are not near the refrigerator, so as to ensure the safety of samples even better.

Small size refrigerator



5 series Pharmacy Refrigerator



2~8°C Pharmacy Refrigerator



Structure Design

- Double-pane glass door with electric heating function can against condensation at 16-32 °C ambient temperature. Also, it is self-closing in case the samples are damaged due to user's forgetting to close the door;
- The internal material is sprayed aluminum plate (optional stainless steel), which is durable and easy-to-clean;
- Removable shelves inside the refrigerator compartment are available for flexible storage solutions and these wire shelves remain stable temperatures wherever products are stored, even in a fully loaded chamber.
- Each shelf is equipped with a label holder, which can record sample information, so that users can select the desired samples easily and quickly.

Efficient refrigeration

- Air circulation with finned evaporator achieves fast cooling and ensures temperature uniformity in the cabinet;
- Industrial compressor with hydrocarbon refrigerant realizes energy conservation and environmental protection;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption. [Comply to SNAP No. 22 Rule].

Control system

- Microprocessor controller can display temperature in 0.1°C increments;
- An access port (Ø 25mm) is convenient to connect monitoring /testing/ back-up device;
- Multiple audible and visible alarm system;
- The RS485 interface is capable of defining and transferring critical temperature data of the equipment by the MODBUS protocol.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Number of Shelves | Net Weight (Kg) |
|-----------|----------------------|-----------------|---------------------------------|---------------------------------|-------------------|-----------------|
| YC-56L | 56 | 2-8 | 542*565*632 | 444*440*404 | 2 | 35 |
| YC-76L | 76 | 2-8 | 542*566*764 | 444*440*536 | 3 | 41 |
| YC-130L | 130 | 2-8 | 650*625*810 | 554*510*588 | 3 | 51 |
| YC-315L | 315 | 2-8 | 650*673*1762 | 580*533*1122 | 4+1 | 87 |
| YC-395L | 395 | 2-8 | 650*673*1992 | 580*533*1352 | 6+1 | 95 |
| YC-525L | 525 | 2-8 | 720*810*1961 | 610*685*1264 | 6 | 148 |
| YC-650L | 650 | 2-8 | 715*941*1985 | 605*725*1515 | 5 | 142 |
| YC-650CL | 650 | 2-8 | 715*941*1985 | 605*725*1515 | 5 | 142 |
| YC-725L | 725 | 2-8 | 1093*772*1992 | 980*595*1260 | 12 | 171 |
| YC-1015L | 1015 | 2-8 | 1180*900*1990 | 1070*670*1515 | 12 | 185 |
| YC-1320L | 1320 | 2-8 | 1453*881*1998 | 1340*670*1515 | 10 | 258 |
| YC-1320CL | 1320 | 2-8 | 1453*881*1998 | 1340*670*1515 | 10 | 258 |
| YC-1505L | 1505 | 2-8 | 1798*886*1997 | 1685*670*1514 | 18 | 322 |

2~8°C Ice Lined Refrigerator

Intelligent Control & Constant Temperature
Multiple Alarms Bring More Security
WHO/PQS



YC-150EW



YC-275EW

Structure Design

- The external material is painted steel sheet, and the internal material is stainless steel. Both are corrosion resistant and easy to clean;
- This refrigerator has steel wire baskets, which are convenient for access;
- The door is equipped with a lock and key to provide a safe storage space for samples;
- 4 universal wheels for easy movement;
- The refrigerator is equipped with a 110mm foam door, which effectively prevents the loss of cold air and has excellent insulation performance.

Control System

- Multiple audible and visible alarm system;
- The microprocessor controller can display temperature in 0.1°C increments;
- The cabinet is equipped with a high-sensitivity temperature sensor to ensure constant internal temperature;
- The battery life exceeds 48 hours, meeting the power demand of the freezer control system within 48 hours after power failure, and ensuring the sample safety.

Refrigeration system

- Industrial compressor with HC refrigerant realizes energy conservation and environmental protection;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption. [Comply to SNAP No. 22 Rule];
- The refrigerator has the precooling function, which can flexibly set the cold storage time, ensure the maximum cold storage capacity of the ice bar before power failure, and extend the retention time of the internal temperature of the refrigerator.

✓ Scope of Application

Suitable for storage of biological products, vaccines, drugs, reagents, etc. Suitable for use in pharmacies, pharmaceutical factories, hospitals, centers for disease prevention & control, clinics, etc.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|----------|----------------------|-----------------|---------------------------------|---------------------------------|-----------------|
| YC-150EW | 150 | 2-8 | 811*775*964 | 585*465*651 | 76 |
| YC-275EW | 275 | 2-8 | 1245*775*964 | 1019*465*651 | 103 |

4°C Blood Bank Refrigerator

Precise Temperature Control Safeguarding Security of Blood



Structure Design

- 1 foamed outer door with double-pane glass window, prevent chamber air leakage and provide a clear view of stored items;
- The electric heating function equipped with the outer door can effectively prevent condensation, thus always providing users with a clear view through the window;
- 1 magnetic sealed inner doors, promote complete door closings to ensure the refrigerating temperature in the cabinet;
- 3 stainless steel drawers remain stable and uniform temperatures wherever products are stored, even in a fully loaded chamber;
- Stainless steel (SUS304) as the internal material, is durable and easy-to-clean;
- 4 castors make it easier to move and fix.

Efficient refrigeration

- Air circulation with finned evaporator achieves fast cooling and ensures temperature uniformity in the cabinet;
- Industrial compressor with hydrocarbon refrigerant realizes energy conservation and environmental protection;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption. [Comply to SNAP No. 22 Rule].

Control system

- Microprocessor controller can display temperature in 0.1°C increments;
- Multiple audible and visible alarm system;
- The equipped built-in data-logger can export up to 12 months of temperature data (that has not been exported) through USB port, either automatically or manually;
- The RS485 interface is capable of defining and transferring critical temperature data of the equipment by the MODBUS protocol;
- The remote alarm contact allows users to obtain alarm information in time even, when they are not near the refrigerator, so as to ensure blood safety even better.

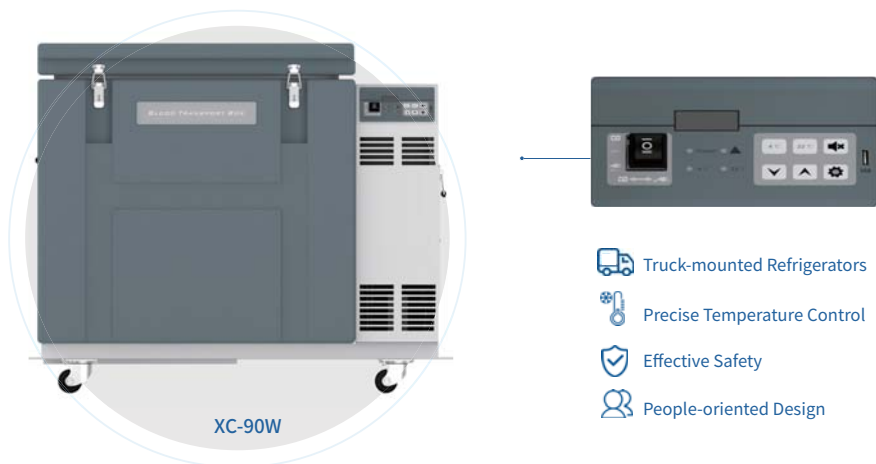
✓ Scope of Application

Suitable for storage of whole blood, blood platelets, red blood cells, biological products, vaccines, drugs, reagents, etc. Suitable for use in blood banks, hospitals, research institutions, disease prevention & control centers, etc.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Number of Shelves | Net Weight (Kg) |
|---------|----------------------|-----------------|---------------------------------|---------------------------------|-------------------|-----------------|
| XC-168L | 168 | 2~6 | 654*774*1330 | 525*550*744 | 3 | 116 |
| XC-170L | 170 | 2~6 | 654*774*1330 | 525*550*744 | 3 | 106 |
| XC-268L | 268 | 2~6 | 640*760*1856 | 530*490*1145 | 5 | 125 |
| XC-380L | 380 | 2~6 | 717*660*1999 | 604*494*1313 | 5 | 134 |
| XC-630L | 630 | 2~6 | 812*912*1978 | 685*690*1373 | 6 | 179 |
| XC-618L | 618 | 2~6 | 812*912*1978 | 685*690*1373 | 6 | 204 |

+4°C/+22°C (±1) Mobile Blood Bank Refrigerator

Constant temperature intelligent control protects blood safety



Structure Design

- Up to 60 pcs of 400 ml blood bags can be stored;
- The horizontal design reduces the loss of cold air inside the refrigerator when opening the door, thus abates temperature fluctuation and improves temperature stability;
- 1 foamed solid door can block light and insulate heat to a great extent, ensuring the safety of the whole blood and blood derivatives;
- 4 baskets inside provide effective storage solutions and remain temperature stability and uniformity at full load;
- Low-density polyethylene (LDPE) as the external and the internal material, because it is durable and easy-to-clean;
- 4 castors (2 with brakes) make it easier to move and fix.

Refrigeration System

- Air circulation with finned evaporator achieves fast cooling and ensures temperature uniformity in the cabinet;
- Industrial compressor with hydrocarbon refrigerant realizes energy conservation and environmental protection;
- HC refrigerant with ultra low GWP minimize thermal radiation, meanwhile to reduce HVAC energy consumption. [Comply to SNAP No. 22 Rule].

Control system

- Microprocessor controller can display temperature in 0.1°C increments;
- The DC power supply (12/24V) is configured to meet the storage requirements during transportation and ensure sample safety throughout the process;
- The equipped built-in data-logger can export up to 12 months of temperature data (that has not been exported) through USB port, either automatically or manually;
- The remote alarm contact allows users to obtain alarm information in time even when they are not near the refrigerator, so as to ensure blood safety even better.

✓ Scope of Application

Suitable for storage of whole blood, blood platelets, red blood cells, biological products, vaccines, drugs, reagents, etc. Suitable for use in blood banks, hospitals, research institutions, disease prevention & control centers, etc.

| Model | Effective Volume (L) | Temperature(°C) | External Dimensions (W*D*H, mm) | Internal Dimensions (W*D*H, mm) | Net Weight (Kg) |
|--------|----------------------|-----------------|---------------------------------|---------------------------------|-----------------|
| XC-90W | 90 | +4/+22 (±1) | 1080*565*856 | 516*365*500 | 75 |

Laboratory Consumables

Vertical Freezer Rack | Sliding-drawer Freezer Rack (Including handle size)

- Made with 304 stainless steel;
- Steel plate thickness: Combination of 0.5mm and 1.0mm;
- Sliding-drawer design for convenient operations;
- Low temperature rated plastic handles are standard on draw racks for ease and safety of operation;
- Labeling slots are standard on draws;
- The outward pouch design protects the slot from potential damage caused by low temperature;
- The front side is printed with Meling's seal;
- Provide personalized customization.



| Model | Layer | Column | Size (W*D*H) |
|----------------|-------|--------|--------------|
| ZKL304-332B-CT | 3 | 3 | 140*413*180 |
| ZKL304-432B-CT | 4 | 3 | 140*413*235 |
| ZKL304-442B-CT | 4 | 4 | 140*549*235 |
| ZKL304-452B-CT | 4 | 5 | 140*685*235 |
| ZKL304-532B-CT | 5 | 3 | 140*413*293 |
| ZKL304-542B-CT | 5 | 4 | 140*549*293 |
| ZKL304-552B-CT | 5 | 5 | 140*685*293 |
| ZKL304-632B-CT | 6 | 3 | 140*413*351 |
| ZKL304-642B-CT | 6 | 4 | 140*549*351 |
| ZKL304-652B-CT | 6 | 5 | 140*685*351 |
| ZKL304-742B-CT | 7 | 4 | 140*549*409 |

Chest Freezer Rack (Including handle size)



- Corrosion resistant stainless steel made of ultra-thick steel plates;
- Suitable for 2-inch and 1-inch freezer boxes and international standardized freezers;
- Chest freezer rack is simple in structure and easy to use, especially suitable for liquid nitrogen tank sample storage.

| Model | Layer | Size (W*D*H) |
|-------------|-------|--------------|
| ZKW304-6-2 | 6 | 140*143*347 |
| ZKW304-7-2 | 7 | 140*143*404 |
| ZKW304-8-2 | 8 | 140*143*461 |
| ZKW304-9-2 | 9 | 140*143*518 |
| ZKW304-10-2 | 10 | 140*143*575 |
| ZKW304-11-2 | 11 | 140*143*632 |
| ZKW304-12-2 | 12 | 140*143*689 |

Laboratory Consumables

2-inch freezer-storage box is the most widely used storage box in the market, which can be divided into PP (polypropylene) storage box, PC (polycarbonate) storage box and PA (paper) storage box according to the material. It can be used for storage of 0.5ml, 1.0ml, 1.5ml and 1.8ml in various brands freezers.

PP Box

- Use medical-grade transparent polypropylene material;
- temperature range from -90 °C to 121 °C, can be used for low temperature storage or autoclave;
- Perfect match low temperature freezer, avoid appearing sequence disorder, greatly improve space utilization;
- Transparent cover designed for easy observation of the sample in the box;
- Cover with grid and code for easy inventory management and error free access;
- Available in five colors: transparent, pink, blue, green and yellow;
- There are gaps for the surrounding of the box, which facilitates rapid cooling of the sample and liquid discharge, and is not easy to frost;
- Angle special design to avoid mis-operation of box cover;
- Standard size design, suitable for all standard storage racks.



PC Box

- Use medical-grade transparent polycarbonate material, wear resistant;
- Temperature range from -196 °C to 121 °C, can be used for the liquid nitrogen storage or autoclave;
- Transparent cover designed for easy observation of the sample in the box;
- Cover with grid and code for easy inventory management and error free access;
- Red, blue, green and yellow colors are available;
- There are gaps for the surrounding of the box to facilitate rapid cooling of the sample and discharge of liquid nitrogen to prevent boiling;
- Angle special design to avoid mis-operation of box cover.



PA Box

- Made of durable cardboard;
- Protective cover of the box is non-frost and easy to resist moisture, low temperature tolerance;
- Temperature range from -196°C to 121°C(Also can be used in autoclave);
- Can be used for liquid nitrogen storage after hole drilling;
- Removable grid strip (with writing area), easy to label on the surface;
- White, pink, blue, green and yellow totally 5 colors are available;
- Suitable for all standard freezer racks.



Cryo Tubes

- The medical level high transparent PP material, can withstand temperature from -196 °C to 121 °C;
- Self-standing, with O shaped gasket to ensure airtight;
- Large writing area, easy to mark by user;
- With scale, adding sample size is easy to identify;
- DNA/RNA free certification ensures stable preservation of genetic samples;
- Through the gamma ray sterilization to ensure the highest sterile requirements;
- Tolerable maximum centrifugal force of 20000G;
- Multi-color selection for the cover, easy to identify samples.



| Model | Type | Volume | Sterile | Description |
|-------------|------------------------------|--------|---------------------------------|--|
| ZKG-1.5-W | External Thread Tube and Box | 1.5ml | Gamma Irradiation Sterilization | with scale and writing area, Temperature tolerance: -196°C - 121°C, comes with on 100-well PC freezer box the box lid has grids, 1200units/box |
| ZKG-2.0-W | External Thread Tube and Box | 2.0ml | Gamma Irradiation Sterilization | with scale and writing area, Temperature tolerance: -196°C - 121°C, comes with on 100-well PC freezer box the box lid has grids, 1200units/box |
| ZKG-2.0-B-W | External Thread Tube and Box | 2.0ml | Gamma Irradiation Sterilization | with scale and writing area, Temperature tolerance: -196°C - 121°C, comes with on 100-well PC freezer box the box lid has grids, 1200units/box |

ULT Freezer + Consumables Solutions

-86°C Vertical ULT Freezer Rack Matching Solution

We will recommend the perfect frozen layer rack matching scheme to improve freezer space utilization and satisfy storage requirements of biobanks.



Drawer Type:5 Layers and 4 Columns
(ZKL304-542B-CT)



Drawer Type:5 Layers and 3 Columns
(ZKL304-532B-CT)



Side-access Freezer Rack

- Made of 304 stainless steel for durability and better appearance;
- No sharp edges to avoid risk of injury;
- Steel plate thickness: combination of 0.5 and 1 mm;
- Side-access design makes it convenient and economic.

Sliding-drawer Freezer Rack

- Made of 304 stainless steel for durability and better appearance;
- No sharp edges to avoid risk of injury;
- Steel plate thickness: combination of 0.6 and 1.2 mm;
- Suitable for common low temperature freezers and standard sized freezer boxes.

| Product | Model | Rack Description | Rack Dimension (W*D*H)mm | ULT Freezer Models |
|-----------------------------|----------------|---|--------------------------|----------------------------|
| 2 inch stainless steel rack | ZKL304-432B-CT | 2 inch stainless rack 4*3 (2 inch box*12) | 140*413*235 | DW-HL100 / 340 |
| | ZKL304-542B-CT | 2 inch stainless rack 5*4 (2 inch box*20) | 140*549*293 | DW-HL218 / 340 |
| | ZKL304-552B-CT | 2 inch stainless rack 5*5 (2 inch box*25) | 140*685*293 | DW-HL398/SA- DW-HL-1008/SA |

| Freezer Model | Freezer Rack Model | Rack Description | Freezer Rack Quantity | Freezer Box Quantity | Cryo Tube Quantity (2ml) |
|---------------|--------------------|---|-----------------------|----------------------|--------------------------|
| DW-HL50HC | ZKL304-632B-CT | 2 inch stainless steel sliding -drawer freezer rack 6*3 (2 inch freezer box*18) | 2 | 36 | 3600 |
| DW-HL100HC | ZKL304-432B-CT | 2 inch stainless steel sliding -drawer freezer rack 4*3 (2 inch freezer box*12) | 3 | 63 | 6300 |
| | ZKL304-332B-CT | 2 inch stainless steel sliding -drawer freezer rack 3*3 (2 inch freezer box*9) | 3 | | |
| DW-HL218HC | ZKL304-542B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*4 (2 inch freezer box*20) | 3 | 132 | 13200 |
| | ZKL304-642B-CT | 2 inch stainless steel sliding -drawer freezer rack 6*4 (2 inch freezer box*24) | 3 | | |
| DW-HL340 | ZKL304-542B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*4 (2 inch freezer box*20) | 9 | 216 | 21600 |
| | ZKL304-432B-CT | 2 inch stainless steel sliding -drawer freezer rack 4*3 (2 inch freezer box*12) | 3 | | |
| DW-HL398/SA | ZKL304-552B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*5 (2 inch freezer box*25) | 12 | 300 | 30000 |
| DW-HL528/SA | ZKL304-552B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*5 (2 inch freezer box*25) | 16 | 400 | 40000 |
| DW-HL678/SA | ZKL304-552B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*5 (2 inch freezer box*25) | 20 | 500 | 50000 |
| DW-HL778/SA | ZKL304-552B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*5 (2 inch freezer box*25) | 24 | 600 | 60000 |
| DW-HL858/SA | ZKL304-552B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*5 (2 inch freezer box*25) | 12 | 660 | 66000 |
| | ZKL304-652B-CT | 2 inch stainless steel sliding -drawer freezer rack 6*5 (2 inch freezer box*30) | 12 | | |
| DW-HL1008/SA | ZKL304-552B-CT | 2 inch stainless steel sliding -drawer freezer rack 5*5 (2 inch freezer box*25) | 14 | 770 | 77000 |
| | ZKL304-652B-CT | 2 inch stainless steel sliding -drawer freezer rack 6*5 (2 inch freezer box*30) | 14 | | |

*The "Cryo Tube Quantity (2ml)" of DW-HL858/SA, DW-HL1008/SA in this chart is the maximum storage.

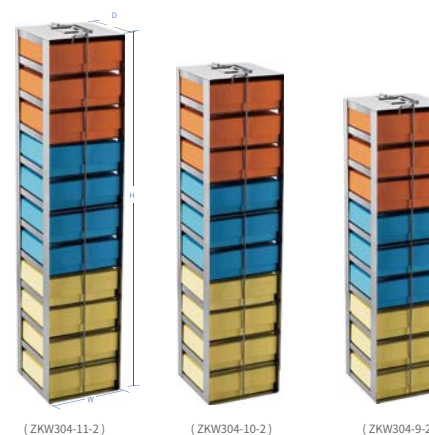
ULT Freezer + Consumables Solutions

-86°C Chest ULT Freezer Rack Matching Solution

Organizing freezer space for increased work efficiency.

Chest Freezer Rack

- Made of 304 stainless steel for durability and better appearance;
- Steel plate thickness: combination of 0.6 and 1.2 mm;
- Suitable for standard sized freezer boxes;
- Widely used for chest ultra low freezers and nitrogen containers.



| Product | Model | Rack Description | Rack Dimension (W*D*H) mm | ULT Freezer Models |
|-----------------------------|-------------|---------------------------------------|---------------------------|--------------------|
| 2 inch stainless steel rack | ZKW304-10-2 | 2 inch stainless rack (2 inch box*10) | 140*143*518 | DW-HW138 / 328 |
| | ZKW304-10-2 | 2 inch stainless rack (2 inch box*10) | 140*143*575 | DW-HW668 |

| Freezer Model | Freezer Rack Model | Rack Description | Freezer Rack Quantity | Freezer Box Quantity | Cryo Tube Quantity (2ml) |
|---------------|--------------------|---|-----------------------|----------------------|--------------------------|
| DW-HW50 | ZKW304-7-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*7) | 6 | 42 | 4200 |
| DW-HW138 | ZKW304-10-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*10) | 9 | 90 | 9000 |
| DW-HW328 | ZKW304-10-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*10) | 24 | 240 | 24000 |
| DW-HW668 | ZKW304-10-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*10) | 40 | 400 | 40000 |

ULT Freezer + Consumables Solutions

-164°C / -150°C Chest Cryogenic Freezer Rack Matching Solution

- -150°C/-164°C Cryogenic freezer choose stainless steel chest frozen layer rack, high strength PC frozen layer box, can withstand the temperature of -196°C-121°C;
- The new appearance design, the gap and line design of the box body, is conducive to the rapid cooling of samples and the rapid discharge of liquid, the transparent box cover design, and the clear digital mark on the box body, easy to observe and find samples.



| Freezer Model | Freezer Rack Model | Rack Description | Freezer Rack Quantity | Freezer Box Quantity | Cryo Tube Quantity (2ml) |
|---------------|--------------------|--|-----------------------|----------------------|--------------------------|
| DW-ZW128 | ZKW304-9-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*9) | 9 | 81 | 8100 |
| DW-UW128 | ZKW304-9-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*9) | 9 | 81 | 8100 |
| DW-UW258 | ZKW304-9-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*9) | 16 | 144 | 14400 |

-40°C Vertical and Chest ULT Freezer Rack Matching Solution



| Freezer Model | Freezer Rack Model | Rack Description | Freezer Rack Quantity | Freezer Box Quantity | Cryo Tube Quantity (2ml) |
|---------------|--------------------|--|-----------------------|----------------------|--------------------------|
| DW-FL528 | ZKL340-542B-CT | 2 inch stainless steel sliding drawer freezer rack (2 inch freezer box*20) | 16 | 320 | 32000 |
| DW-FW150 | ZKW304-10-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*10) | 12 | 120 | 12000 |
| DW-FW270 | ZKW304-10-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*10) | 21 | 210 | 21000 |
| DW-FW360 | ZKW304-10-2 | 2 inch stainless steel chest freezer rack (2 inch freezer box*10) | 27 | 270 | 27000 |

*The model, parameters and performance specified in this brochure may be changed without prior notice because of product upgrading.
 *There may be differences between the product images shown in this brochure and the actual products. When you buy these equipments, please confirm with the factory at first.
 *The verification date of product parameters is 2021.10.21.

Optional Features

CO2 backup system

- Small footprint and portable with convenient installation;
- Applicable to all the ULT freezers or refrigeration cabinet which has access port;
- 48 hours battery back-up in case of main power failure;
- Large capacity, maintenance-free battery;
- Visible and audible indicators of system status, perfect alarm system to protect your samples safety;
- Door safety interlock switch prevents coolant injection if freezer door is opened; Injection valve will back to the original state once the door is closed properly.



Chart Recorder

- The module measures temperature by means of a probe filled with a neutral gas linked to a capillary tube;
- This technology provides you with temperature recorders without electronics;
- No power supply is required;
- A spring maintains the fiber pen arm for a better reliability of the system;
- A locked door avoids any trouble during the monitoring process;
- European imported brand, durable and reliable.



Remote alarm and RS485 port

Through RS485 contact and conventional protocol, freezer can connect with CMS for data communication, such as product failure, alarm information can be transmitted through the external equipment, to ensure the storage safety of samples.



Meling Product Map

-86°C Ultra-low Temperature Freezer>>



-40°C Ultra-low Temperature Freezer/-60°C Deep Freezer>>



-40°C Ultra-low Temperature Freezer>>

2~8°C Ice Lined Refrigerator>>



-25°C Biomedical Freezer>>



2~8°C, -10~-26/-40°C Combined Refrigerator & Freezer>>

4±1°C Blood Bank Refrigerator >>



2~8°C Pharmacy Refrigerator

