bitstrong

Intelligent Protection of Life Science **bitstrong biomedical**

bitstrong Biomedical Complete Vaccine Cold Chain Solutions

bitstrong Biomedical: The truly worry free and only option that covers your complete COVID-19 vaccine cold chain requirements!

From vaccine transportation, preservation, management to inoculation. Partnering with Haier Biomedical ensures you are safeguarding the vaccines from manufacturer to the vaccinated and securing the safety and reliability of vaccines for millions of people.

2~8°C | -20°C | -70°C COVID-19 Vaccine Preservation

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2~8°C Vaccine Cold Chain Solutions

Storage

National/Provincial Level
Recommendation: Vaccine cold room

WHO/PQS approved

District Level
Recommendation: Vaccine cold room and electrical Ice-lined vaccine fridges

WHO/PQS approved

Health Facility Level
Recommendation: Vaccine cold room and solar direct drive vaccine fridges

WHO/PQS approved

Pharmacy Refrigerators for Vaccines

Solid or glass door pharmacy refrigerators for vaccine storage, with precise temperature control and reliable operation featuring multiple alarms and safety features for optimal product security. Choose from over 20 models from on/under counter fridges to large double door models suitable for high volume storage requirements within pharmacy or vaccine cold chain logistics centres.

Blood Bank Refrigerators for Vaccines

With multiple temperature controls to guarantee stability and precise temperature. The refrigeration system is designed with an inverter compressor and dual-speed fans, providing an optimal temperature performance of 4±1°C inside the cabinet to safeguard stored products.

2~8°C Vaccine Cold Chain Solutions

Transportation

National/Provincial Level
Recommendation: Refrigeration Vehicle
Long distance transportation and large loading capacity

District Level
Recommendation: Passive Vaccine Transport Cooler

Monitoring

Remote Temperature Monitoring - All Levels

The unit can be used for real-time monitoring of warehousing and distribution of vaccines. The application solution scenarios include refrigerated vehicles, cold rooms, refrigerators and freezers.

Vaccine Stock Monitoring Solution

Used to monitor the vaccine status of all vaccination sites nationwide, providing Enterprise Resource Planning (ERP) management for decision makers with timely and accurate information of vaccine inventory and temperatures.

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-15°C ~ -40°C Vaccine Cold Chain Solutions

Storage

-40°C Biomedical Freezer

- Optimized energy-saving hydrocarbon refrigeration system
- Super quiet high-efficiency compressor
- Superior insulation
- Precise temperature uniformity
- Different volumes of storage
- Adjustable shelf/partition
- Low noise

-30°C Biomedical Freezer

- Advanced refrigeration technology
- Energy-saving frequency conversion technology
- Precise temperature uniformity
- Super silent compressor technology
- Energy-saving fan
- Super low power consumption
- Adjustable shelving

-25°C Biomedical Freezer

- Efficient hydrocarbon compressor
- Low power cooling system
- Energy saving and environmentally friendly refrigeration technology
- LBA foamed polyurethane insulation
- European ROHS directive materials
- Structural noise reduction design
- Mechanical lock plus lock catch design

-25°C~-15°C Vaccine & Icepack Freezer

- Optimized refrigeration system
- Internal temperature range of -15°C ～ -25°C
- CFC-free high-density foam insulation
- Electronic temperature controller with digital display
- Safety lock avoiding unauthorized access
- Easy to clean stainless-steel interior
- Various sizes of storage baskets
- Easy to clean drainage port

-15°C ~ -40°C Vaccine Cold Chain Solutions

Transportation

-25°C~-15°C Passive Cooling Transport Coolers

- High stability and durable
- Phase change cool storage technology utilized to reduce CO_2 emissions
- Light weight, easy to carry
- Extended heat preservation time, adapts to complicated and changeable transportation conditions

-20°C Active Cooling Transport Coolers

- DC frequency conversion compressor, superior energy efficiency
- Electronic gyroscope in board, effective protection for compressors
- Rotational molding body, adapted design for complex transport environments
- Supports AC and DC power

Monitoring

Remote Temperature Monitoring Device (RTMD)

The external temperature sensor measures the temperature, records and stores the measured temperature values automatically, and transmits the data to the platform through GPRS, the remote platform monitoring system provides the ultimate sample safety. It can be used for real-time monitoring of warehousing and distribution of food, medicine, vaccine, blood, reagents, biological products, biological sample tissue and other items as required.

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-70°C ~ -86°C Vaccine Cold Chain Solutions

Storage

-86°C TwinCool Dual Compressor ULT Freezer

Ultra low temperature freezers with intelligent TwinCool technology offers users the highest level of protection for valuable samples; if one compressor fails, the second compressor is designed to maintain the cabinet temperature at -80°C, ensuring sample integrity.

-86°C Salvum Ultimate Smart Frequency ULT Freezer

Salvum Ultimate Smart frequency conversion freezers designed with adaptive control, follows user patterns and environmental conditions to adjust the refrigeration system, substantially reducing energy without compromising performance.

-86°C Salvum Low Energy ULT Freezer

Salvum low energy ultra-low temperature freezers, with innovative cabinet design to reduce energy consumption, provides reliable performance whilst reducing operational noise. Full range from 100 litre to 828 litre capacities.

-86°C Salvum Low Energy Touch Screen ULT Freezer

- 10-inch high-performance LCD capacitive touch screen, sensitive touch operation; intuitive display of inside temperature, ambient temperature, input voltage and other data and temperature curves
- Multiple safety management and control systems to maximize sample safety: standard password lock, optional fingerprint module, NFC card module, face recognition, ensuring safe and secure multi-user management
- Adopting an optimized hydrocarbon refrigeration system with independent intellectual property rights, enhanced energy-savings and environmentally friendly, saving more than 30% of electricity, with Energy Star certification

-86°C Water-Cooled ULT Freezer

Haier Biomedical's water-cooled ULT freezers are designed to meet strict requirements for storage of plasma, biological materials, vaccines, reagents, specimens, and other valuable samples. They are ideal for installations in hospitals, clinics, blood banks and medical research facilities where freezer heat must be removed by cooling water.

-70°C ~ -86°C Vaccine Cold Chain Solutions

-86°C Local Points of Care • Clinical Sites • Pharmacies ULT Freezer

The DW-86L100J was designed to provide optimal, reliable and safe storage with low noise output and its configuration allows the unit to be placed on or under a counter to maximise the use of the space available.

CO_2 Backup System

Adopting carbon dioxide quantity alarm technology which can monitor any insufficiency of carbon dioxide intelligently and in real-time inform users with remote alarms; Designed with exquisite body, suitable for mounting on top of the refrigerator.

LN_2 Backup System

LN_2 backup cooling system is an independent refrigeration system for a ULT freezer. When there is a loss of power or the temperature of the freezer rises to the high alarm set point, the LN_2 backup system can be automatically activated to inject LN_2 into the chamber to maintain the freezer temperature. The backup system operates on a rechargeable battery when there is a loss of main power.

Transportation

-70°C Intelligent Control Cold Chain Transport Cooler

- Optional smart IoT monitoring & superior temperature control performance
- Manufactured with vacuum insulation panel(V.I.P.) insulation technology and superior temperature control performance
- Multiple functions to the operation status are achievable such as monitoring, alarm and so on
- Light weight with inlaid clasp, easy to carry

-70°C Vaccine Carry Transport Solution

- Independent operation mode without any external power supply
- Suitable for storage & transport of COVID-19 vaccine (-70°C)
- Standard locking cap to ensure the safety of vaccines

Monitoring

Remote Temperature Monitoring Device (RTMD)

The external temperature sensor measures the temperature, records and stores the measured temperature values automatically, and transmits the data to the platform through GPRS, the remote platform monitoring system provides the ultimate sample safety. It can be used for real-time monitoring of warehousing and distribution of food, medicine, vaccine, blood, reagents, biological products, biological sample tissue and other items as required.