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### Note:



Products with Energy Star Certification.

Haier Biomedical Intelligent Protection of Life Science

Products are manufactured with Touch Screen.



Haier Biomedic Internationa

right of final interpretation of this brochure, please contact us for any further information if required.

# 2021 **Product Portfolio** Key Features and Unique Selling Points

### Haier Biomedical **ULT Freezer**





- Safe, more convenient and economical alternative to LN<sub>2</sub> refrigeration systems
- Adjustable temperature range of -150°C to -130°C
- Environmentally friendly HC refrigerants
- Microprocessor control system with clear LCD display
- Multiple alarms for safety and sample protection

### -86°C Frequency Conversion ULT Freezer Models: DW-86L959BP(T)/829BP(T)/729BP(T)/579BP(T)



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- Adaptive control follows user patterns, load and environmental conditions
- Ultra low power consumption
- Precise temperature uniformity of ±3°C (setting temperature at -80°C)
- Standard LED (BP) and Touchscreen (BPT) models available
- Optional IoT software system



- Dual refrigeration system for ultimate sample protection
- High speed refrigeration system for faster pull down and temperature recovery
- Low noise design
- Standard LED (S) and Touchscreen (ST) models available
- Remote alarm and USB connectivity
- Optional IoT software system

### -86°C Water-Cooled ULT Freezer Models: DW-86L959W/828W



- Advanced water-cooled refrigeration system, 90% heat removed by cooling water
- Precise temperature uniformity of ±3°C (setting temperature at -80°C)
- Intelligent control system
- 10-inch large LCD capacitive screen
- Multiple alarm protection with USB and remote alarm connectivity
- Single version sample management software (network version is optional)





# **Consumables for ULT Freezer (category)**



- SBS (Styreneic Block Copolymers) racked 2d cryogenic vial
- Innovative cryogenic vial
- Conventional cryogenic vial

- Equipped with an intelligent temperature monitoring system, real-time temperature data

- Standard low energy models utilising hydrocarbon energy saving refrigeration technology
- Precise temperature uniformity of ±5°C (setting temperature at -80°C)
- Large selection of sizes and configurations to meet most requirements, from 100L to 828L
- Optimized auto-cascade refrigeration technology (single compressor)
- Provides back-up in event of ULT failure to control cabinet temperature
- Interlocked design to turn off the LN2 injection when the door is opened
- Light weight and portable design, suitable for installation on top of a freezer
- Freezer boxes
- Freezer racks
- PCR consumables

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• Large selection of sizes and configurations to meet most requirements, from 92L to 508L

- Reliable temperature control and performance
- Clear display with multiple alarms





- Intelligent defrosting technology safeguards the stability of storage temperatures
- Precise temperature uniformity of ±3°C (setting temperature at -30°C)

• Optional blood basket storage racks to store up to 900 x 200ml blood bags

- Energy saving with variable speed inverter technology and HC refrigeration
- Excellent temperature uniformity of ±3°C in a large storage space (setting temperature
- Alarm record guery function high/low and average temperature data

Precise temperature uniformity of ±4°C (setting temperature at -30°C)

- Environmentally-friendly and energy efficient hydrocarbon refrigeration







### Pharmacy Refrigerator Models: HYC-1378/610



- Standard pharmacy refrigerators with forced-air cooling
- Precise temperature uniformity of ±3°C (setting temperature at 5°C)
- Microprocessor controller with LED display with multiple alarms
- Condensation-free heated self-closing door

### **Under-counter Pharmacy Refrigerator** Models: HYC-118/118A/68/68A

- High-efficiency hydrocarbon compressor and refrigerant
- Air cooling, with auto defrost for superior cabinet temperature uniformity
- Small size, fitting easily under the table
- Microprocessor control with LED and multiple-alarms with 8-hour power failure alarm
- Remote alarm terminal

### **Combined Refrigerator and Freezer** Model: HYCD-469

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- Temperature range: 2°C ~ 8°C and -40°C ~ -10°C
- Microprocessor temperature control accuracy 0.1°C (refrigerator) and 1°C (freezer)
- Separate doors for refrigerator and freezer with independent lock catches
- Multiple alarm functions
- Large LED screen display
- USB port
- Optional printer
- Four casters and two levelling legs

# Combined Refrigerator and Freezer Models: HYCD-282(A)



- Dual, independently controlled refrigeration and freezing systems
- Stainless steel interior
- Backup battery
- 48-hour power failure alarm
- Remote alarm contacts
- USB interface for data download





Models: HYC-1099T/1099TF/509T/509TF

• Solid or glass door options

• Environmentally-friendly and energy efficient HC refrigeration

# Pharmacy Refrigerator & Reagent Refrigerator

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• Air cooling, with auto defrost for precise temperature uniformity of ±3°C (setting tem-

- Web-based reagent management, assist in the process of data collection and analysis, accurate accounting and reporting, one platform can manage multiple equipment units
- Automatic inventory check and intelligent input/output inventory checks
- Intelligent inventory replenishment function and near expiry early warning

- Large 7" touchscreen with electromagnetic locks and NFC authority management
- Excellent temperature uniformity of ±2°C (setting temperature at 5°C)
- Frequency conversion technology with adaptive control



### **Advanced Blood Bank Refrigerator** Models: HXC-1369/629(B)/429/149

- Reliable temperature performance 4°C ±1°C
- Frequency conversion technology with adaptive control
- Environmentally-friendly and energy efficient HC refrigeration
- NFC swipe card module
- USB interface as standard with remote alarm in real time

### **Smart Blood Bank Refrigerator** Models: HXC-1369T/629T(B)/429T/149T

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- Smart touchscreen controller with NFC card access and optional fingerprint module
- Reliable temperature performance 4°C ±1°C
- Frequency conversion technology with adaptive control
- Environmentally-friendly and energy efficient HC refrigeration

### Automated Blood Bank Refrigerator Models: HXC-629R(B)/429R/149R



- Automatic RFID tag identification
- IoT management of input & output inventory
- Smart touchscreen controller with NFC card access
- Reliable temperature performance 4°C ±1°C
- Frequency conversion technology with adaptive control
- Environmentally-friendly and energy efficient HC refrigeration

### Self-Service Blood Distribution with Smart IoT Technology Model: HXC-629ZZ



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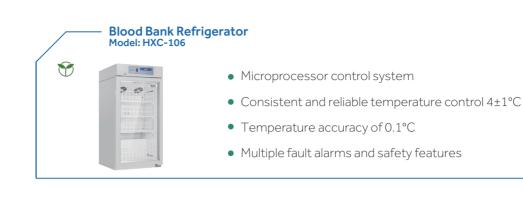
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- Electronic checking and bar code management
- Safe and reliable, making blood collection process traceable
- Real-time view and control of refrigeration operation

### -30°C Plasma Freezer Models: DW-30L1280TR/DW-30L818TR

- Automatic RFID tag identification
- Multi-compartment storage basket
- Dual cooling systems
- Frost free
- IoT management of input & output inventory
- IoT real-time temperature monitoring





# Vehicle-mounted Blood Bank Refrigerator Model: HXC-279

- Ultra-long holdover, superior thermal insulation
- High-efficiency rapid refrigeration

# Plasma Apheresis System Model: XJ-III



- The whole process can be automatically monitored and managed
- Large color touch screen, easy to operate
- Small footprint, movable and easy to use

### Active Cooling Logistics Cold Chain Transport Cooler Model: HZY-40Z

- DC frequency conversion technology
- Tilt protection function
- Integrated rotational molding body
- Multiple power supply
- Supporting AC & DC power

### Intelligent Control Cold Chain Transport Cooler Models: BW25-8A/12A/18A/36A/64A;BW50-12A/36A

- Light weight with inlaid clasp, easy to carry
- Smart IoT, check the insulation status at any time (Optional)



High quality DC compressor, for improved stability during vehicle transportation

- Standard USB interface, it can store 10-years of temperature data
- 5 inner doors to reduce rapid cold air loss

• Intelligent identification, safe and effective error prevention system

• Optimized system and structural noise reduction design, low operating noise

• Manufactured with vacuum insulation panel insulation technology, stable performance



### **Transport Cooler** Haier Biomedical



### Active Cooling Transport Cooler for Biological Products Models: HZY-15Z/8Z

- For transportation of biological products 2°C ~ 10°C
- Economical and energy-efficient semi-conductor refrigeration
- Utilises PCM ice packs and high-density insulation
- At 25°C ambient or below maintains conditions for more than 2 hours (no power)
- 12V DC power supply

### Active Cooling Transport Cooler for Biological Products Model: HZY-8ZA



### For transportation of biological products 2°C ~ 10°C

- Economical and energy-efficient semi-conductor refrigeration
- Utilises PCM ice packs and high-density insulation
- At 25°C ambient or below maintains conditions for more than 2 hours (no power)
- 12V DC power supply
- Includes GPS positioning, one-button bluetooth printing and camera

### **Active Cooling Transport Cooler for Biological Products** Model: HZY-15ZA

- GPS positioning, one-button bluetooth printing, NFC access and camera
- For transportation of biological products 2°C ~ 10°C
- Economical and energy-efficient semi-conductor refrigeration
- Utilises PCM ice packs and high-density insulation
- At 25°C ambient or below maintains conditions for more than 2 hours (no power)
- Includes IoT enabled for real-time temperature data information and tracking

### Passive Cooling Transport Cooler for Biological Products



- Utilises PCM ice packs and efficient ABS high-density insulation
- Maintains stable temperature of 2°C ~ 10°C
- At 43°C ambient or below maintains conditions for more than 8 hours
- Handle and casters for easy handling

### Passive Cooling Transport Cooler for Biological Products Model: HZY-5B

- Utilises PCM ice packs for cold chain transportation of blood and other biological products
- Efficient ABS high-density insulation
- Maintains stable temperature of 2°C ~ 10°C
- At 25°C ambient or below maintains conditions for more than 4 hours
- Access control integrated management software
- IoT enabled for real-time temperature data information and tracking

# **Transport Cooler & Vaccine Refrigerator**



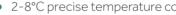
- Embedded PCM ice pack at 4°C for cold storage
- than 1 hour
- Multiple fault alarms
- Vehicle power plug
- Supporting AC & DC power

### **Passive Cooling Transport Cooler for Infectious Materials** Models: HZY-10B (P620/650)



- Passive refrigeration system • Longer insulation time
- PCM ice pack for cold storage
- High strength aluminum magnesium alloy shell, meeting PI620 packaging requirements for class A infectious substances
- stances

### Vaccine Transport Cooler Models: QBLL0606/QBLL0812/QBLL0820/QBLL0830



- High strength medical plastic and non-fluorinated polyurethane foaming insulation material ensure durable and superior temperature insulation performance
- Easy to carry with shoulder strap

### Vehicle-mounted Transport Cooler Models: DW-80WZ15



- High quality HC high-efficiency compressor, energy saving and environmental friendly
- Superior uniformity and insulation performance
- Superior noise-reduction design, achieve 45 dB(A) sound level
- Hidden metal handle, safe and durable, easy to carry

### **Smart Vaccine Refrigerator** Models: HYC-361/61

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- Solutions for both vaccine preservation (stock) or vaccine administration (point of care)
- IoT enabled with integrated VIMS (vaccine information management system)
- Steamline and automate vaccine delivery to improve efficiencies and eliminate errors.
- Complete end-to-end information and data on vaccine from warehouse to patient.
- The vaccination records will be uploaded in real-time to the system. Records are traceable, making it possible to trace a specific vaccine code back to a specific person.





- Under 25°C no-load condition, the air temperature in the box rising to 10°C takes more

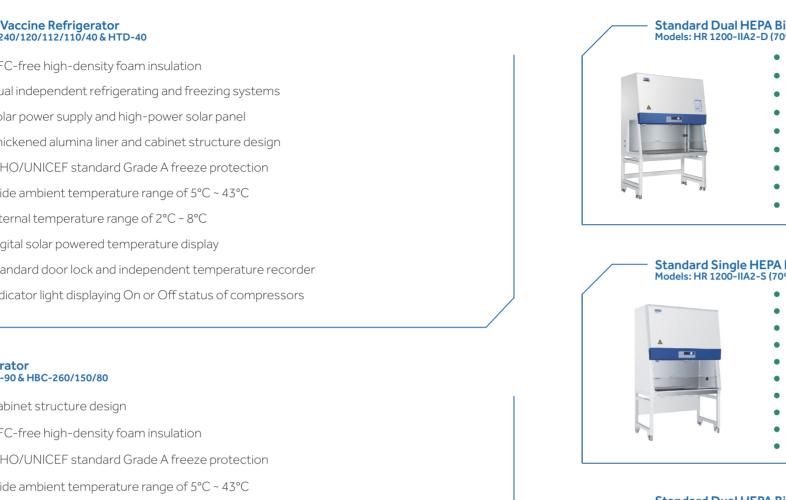
• Under 25°C loading, the air temperature in the box rising to 10°C takes more than 2 hours

- Light plastic PP shell, meeting PI650 packaging requirements for class B infectious sub-
- 2-8°C precise temperature control, suitable for vaccine cold chain transportation



### Vaccine Refrigerator & Icepack Freezer Haier Biomedical

# Laboratory Equipment



- Indicator light displaying On or Off status of compressors
- Wide operating voltage range of 172~264 volts

## **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



- Models: HR 1500-IIA2/HR 1200-IIA2/HR 900-IIA2 (70% circulation and 30% exhaust)
  - Intelligent constant air velocity system

  - UV lamp sterilization timed startup

  - LCD display screen
  - Sound and light alarm function
  - Ergonomic 10 degrees tilt design
  - Adjustable work bench height
  - With CE and TÜV SÜD Mark Certification

### **Classic Series Biosafety Cabinet** Models: HR 40-IIA2 (70% circulation and 30% exhaust)

- Ultra-efficient air filter (ULPA)
- Superior filtering effects 99.9995% for 0.12µm particles
- Volute forward centrifugal fan
- UV lamp sterilization timed startup
- Sound and light alarm function
- Ergonomic 10 degrees tilt design
- Adjustable work bench height
- With CE and TÜV SÜD Mark Certification



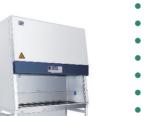
### **Standard Dual HEPA Biosafety Cabinet** Models: HR 1200-IIA2-D (70% circulation and 30% exhaust)

- Dual: exhaust filters, DC ECM fans
- Intelligent constant air velocity system
- Superior filtering effects 99.995% for 0.3µm particles
- Double sided glass construction design
- Front window stainless steel shelf design for safe operation
- Ergonomic 10 degrees tilt design
- Split work surface
- Adjustable work bench height
- With CE and TÜV SÜD Mark Certification

# Standard Single HEPA Biosafety Cabinet Models: HR 1200-IIA2-S (70% circulation and 30% exhaust)

- Dual: air velocity sensors, DC ECM fans Intelligent constant air velocity system
- AAF high efficiency particulate air filter (HEPA)
- Superior filtering effects 99.995% for 0.3µm particles
- Double sided glass construction design
- Front window stainless steel shelf design for safe operation
- Ergonomic 10 degrees tilt design
- Split work surface
- Adjustable work bench height
  - With CE and TÜV SÜD Mark Certification

### Standard Dual HEPA Biosafety Cabinet • Ultra-efficient air filter (ULPA)



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### Solar Direct Drive (SDD) Vaccine Refrigerator Models: HTCD-160/90 & HTC-240/120/112/110/40 & HTD-40

- CFC-free high-density foam insulation
- Dual independent refrigerating and freezing systems
- Solar power supply and high-power solar panel
- Thickened alumina liner and cabinet structure design
- WHO/UNICEF standard Grade A freeze protection
- Wide ambient temperature range of 5°C ~ 43°C
- Internal temperature range of 2°C ~ 8°C
- Digital solar powered temperature display
- Standard door lock and independent temperature recorder
- Indicator light displaying On or Off status of compressors

### **Ice-lined Vaccine Refrigerator** Models: HBC-240/120 & HBCD-90 & HBC-260/150/80

- Cabinet structure design
- CFC-free high-density foam insulation
- WHO/UNICEF standard Grade A freeze protection
- Wide ambient temperature range of 5°C ~ 43°C
- Internal temperature range of 2°C ~ 8°C.
- Digital solar powered temperature display
- Standard door lock and independent temperature recorder

# 10dels: HBD-286/116

• Superior filtering effects 99.9995% for 0.12µm particles • Interlocking of UV lamps, the fan, the glass doors and the LED lamp

• Interlocking of UV lamps, the fan, the glass doors and the LED lamp



### Classic Series Biosafety Cabinet Models: HR 40-IIB2 (100% exhaust)

- Ultra-efficient air filter (ULPA)
- Superior filtering effects 99.9995% for 0.12µm particles
- Volute forward centrifugal fan
- UV lamp sterilization timed startup
- Interlocking of UV lamps, the fan, the glass doors and the LED lamp
- Front window stainless steel shelf design for safe operation
- Sound and light alarm function
- Ergonomic 10 degrees tilt design
- Adjustable work bench height
- With CE and TÜV SÜD Mark Certification

### Smart IoT Series Biosafety Cabinet Models: HR1800-IIA2-X/HR1500-IIA2-X/HR1200-IIA2-X

- Dual: SMI pressure sensors, light airflow speed sensors, EBM DC fans, ULPA filters, lights
- IoT access management system (optional)
- Intelligent constant air velocity function
- UV lamp service life warning and one-touch timer function
- Optional electrically operated glass door
- Optional surveillance cameras to record the operating status
- Airflow blocking patented technology
- HEPA filter service life warning function
- With CE and TÜV SÜDMark Certification

### Clean Bench Models: HCB-1300V/900V/1600H/1300H



- Class 5 | IS014644.1 Standard for Air Cleanliness
- High efficiency particulate air filters (HEPA)
- Superior filtration efficiency of 99.99% or above for particles of 0.3um or above
- Pre-cleaning function cleans working area before users start
- One-touch UV lamp operation with start delay for safety
- Built-in light to reduce eye strain
- UV and light intelligent interlock function for additional safety

### CO<sub>2</sub> Incubator with Dry Heat Sterilization Models: HCP-258/168/80



- Precise temperature control
- IR CO₂ sensor
- 180°C dry heat sterilization technology
- Easy to clean
- Quick recovery after door openings
- Active heat condensation technology
- Intelligent controller



### **High-pressure Steam Sterilizer** Model: HRLM-80



- One-click automatic program control
- Automatic drying function
- Multiple exhaust methods for effective sterilization
- One-button quick start programs for instruments, dressings, rubber and liquids

- Timer preset start function

## Constant Climate Dry Chamber Models: HZS-60/HFS-160



- temperatre control
  - Multiple safety protection features, safe and stable

  - Rapid recovery after door open
  - Optional IoT technology for real-time remote monitoring

### **Constant Climate Chamber** Models: HHS-756/506/256



- 40°C temperature uniformity of ±0.5°C • Central temperature fluctuation of ±0.2°C
- 75% humidity fluctuation ±1%
- Energy-saving semiconductor technology
- Intelligent control of PTC humidification
- Low daily water consumption
- No need to recycle waste water, save space
- Low vibration and noise

### Desktop High-speed Refrigerated Microcentrifuge

- Precise temperature control and ultra-fast refrigeration
- Precise balance detection
- Smart lid lock and USB interface
- even in gloves

# Laboratory Equipment

• Superior four-sided direct heating technology with an innovative air duct structure,

• High thermal insulation performance, energy saving and environmental protection

- Supporting fast pressure relief and slow pressure relief
- Sterilizer heating process and preheating control functions

• Superior pre-heating technology with an innovative air duct structure, achieve precise

• High thermal insulation performance, energy saving and environmental protection

• Accurate temperature and humidity control

• Auto-ID instant rotor identification and rotor service life statistics

• Large smart screen controller provides an interactive interface which is easy to operate



### Haier Biomedical LN<sub>2</sub> Container

# **Biobank Series LN<sub>2</sub> Solutions**

- Large scale capacity stores up to 94,875×2ml Vials
  - Vapour phase storage at -190°C prevent crosscontamination
  - Supplied with intelligent Cryosmart liquid nitrogen system monitoring and control solution
  - LN<sub>2</sub> splash proof design for safer operation

### **Smart Series LN<sub>2</sub> Solutions**



### • 5 models from 2,400 to 6,000 cryovial capacity

- Cloud data storage for traceability
- Low consumption rate and high performance stability
- Durable aluminium construction
- Real time monitor of temperature and fluid level
- New lock design
- 5-year vacuum warranty

### **Medium Series LN<sub>2</sub> Solutions**

- Heavy duty lockable enclosure
- Compatible with all major cryobox brands
- Liquid or vapour phase option available
- Durable aluminium construction
- Temperature monitoring available
- High thermal efficiency
- Ultra-low evapouration loss
- 5-year vacuum warranty

### **Dryshipper Series LN<sub>2</sub> Solutions**



YDZ-200

- Rugged and durable aluminium construction
- Vapour phase storage
- Straw and cryovial storage options
- No LN<sub>2</sub> spillage
- Lockable lids
- Cryo absorbant
- 3-year vacuum warranty

### Self-pressurized Series LN<sub>2</sub> Solutions

- Stainless steel construction
- Integral safety mechanisms
- Labelled valves for easy identification
- Safety valves
- Decant valves
- Pressure raising
- Liquid storage
- Rotary ring construction
- 5-year vacuum warranty



## LN<sub>2</sub> Container & Health Care Products

### Low Temperature Transport Trolley

- Passive refrigeration system
- Longer insulation time
- PCM ice pack for cold storage
- class A infectious substances
- substances

### **Smart Mobile Clinic Inoculation Solution**

- Improved and convenient vaccination services
- Improved the access to immunization services
- Promote and improve the equity in immunization services
- Guarantee the accuracy and immediate reporting of data and information remotely

### Intelligent Vaccination Shelter



- Long holdover time after power off, safe vaccination storage
- is safer
- Independent monitoring of each operation area to achieve real-time supervision and inspection of the whole process of vaccination
- Shelter footprint is small, transportable, can be deployed rapidly

### **Smart Autonomous Disinfection Units**

- Scheduled disinfection tasks
- Autonomous obstacle avoidance and autonomous navigational system
- Automatic return to charging station
- User remote deployment

### P2+ Mobile Nucleic Acid Testing Vehicle

- Standard multi-independent functionally designed areas
- Long distance travel range
- Strong emergency response and react capability
- Visible intelligent control system
- Ultra-clean air purification system





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• High strength aluminum magnesium alloy shell, meeting PI620 packaging requirements for

• Light plastic PP shell, meeting PI650 packaging requirements for class B infectious

- Equipped with air purification sterilizer and ultraviolet disinfection, the cabin environment



### **Health Care Products** Haier Biomedical



- Ultra-effective, triple-action disinfection plasma, UV plus titanium dioxide photocatalyst and nano-silver ion filtration
- Kills up to > 99.9% of viruses and bacteria within air
- Negative-ion generator for clean fresh air

### **Oxygen Concentrator** Models: CP801/502/303/101

• High quality compressor



- Durable and efficient molecular sieve
- Oxygen concentration above 90%
- Settable oxygen absorption time
- High-performance solenoid valve
- Safe and odorless Dow Corning silicone tube

### Infrared Thermometer Models: AET-R1B1/UFR106



- Highly sensitive infrared probe
- Supporting noncontact measurement within one or two seconds
- LED digital display
- One-unit multi-purpose
- Human body & general environment modes
- Comfortable to hold

### **Blood Pressure Monitor** Models: BSX583/U80H/B15



- One-button start
- Low-noise design
- Memory storage
- ABS Material +LCD big screen display
- WHO Standards





Lora wireless ad hoc network communication technology, strong adaptability

• Smart gateway with backup battery, supports data breakpoint with continued transmission

• Powered by battery, and the working time is more than one year

• Can achieve the monitoring of cold room door, warehouse door and other door body open-

• Can monitor whether the power supply of the public grid is at normal capacity

