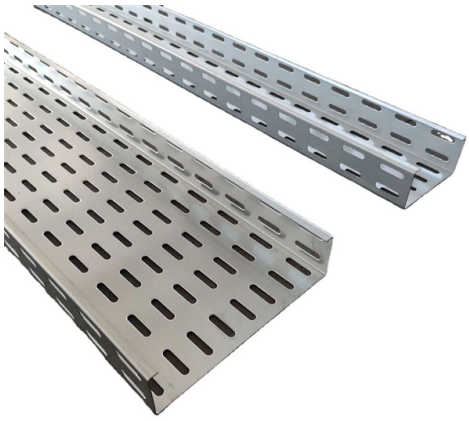
Micro-module computer room with low temperature resistance and three-year warranty



Overview

In summary, ZTT micro modular data center is a complete and small data center that can be independently used for computing or storage resources.

Key Takeaways

Micro-module computer rooms are modular, self-contained data center solutions designed for low-temperature operation, rapid deployment, and high reliability, often supported by multi-year warranties. OverviewMicro-module computer rooms are stand-alone, modular data centers that integrate power supply, cooling, rack systems, cabling, and monitoring into a single unit. They are designed for rapid deployment, flexible expansion, and high operational efficiency, making them suitable for enterprises, government institutions, and cloud service providers.

These systems can operate independently or be combined to scale up a larger data center infrastructure.

Low-

Temperature Resistance

Modern micro-modules are engineered to function in ultra-low temperature conditions, typically ranging from -30°C to 45°C with optional low-temperature kits. The design includes: Closed cold/hot aisle containment to isolate airflow and improve cooling efficiency. Air-cooled or water-cooled refrigeration systems with R410A refrigerant for stable operation in extreme climates.

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Robust cabinet and component materials that maintain performance under thermal stress, similar to cold-resistant microcontrollers used in extreme environments. These features ensure that IT equipment remains operational even in harsh or remote locations.

Key Specifications

Cabinet capacity: Single row up to 24 cabinets, dual row up to 48 cabinets. Power supply: 380/400/415Vac, 50/60Hz, 3Ph+N+PE, with integrated UPS and precision power distribution. Cooling capacity: 25kW–45kW per in-row air conditioner, with modular scalability.

Monitoring: Intelligent management systems track voltage, current, temperature, humidity, and PUE in real time. Protection: IP20-rated cabinets, anti-static flooring, and optional access control via passwords, IC cards, or fingerprints.

Warranty and Reliability

Many micro-module solutions offer multi-year warranties, typically three years, covering key components such as UPS, cooling systems, and structural elements. Intelligent monitoring systems enable predictive maintenance, reducing downtime and extending equipment life. Features include: Real-time health assessment of batteries, capacitors, and fans.

Proactive alerts and maintenance recommendations. Asset lifecycle management and capacity optimization.

Advantages

Rapid deployment: Prefabricated modules allow on-site installation in days rather than months. Energy efficiency: Optimized airflow and high-efficiency UPS reduce PUE and operational costs. Scalability: Additional modules can be added without disrupting existing operations.

Reliability: Independent subsystems ensure minimal impact from failures in other modules. Micro-module computer rooms provide a robust, low-temperature-resistant, and warranty-backed solution for organizations seeking flexible, high-performance data center infrastructure.

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Article Content

iSmart Series Micro Data Center Solution

All equipment is pre-installed and pre-commissioned in the factory, you can put into use directly. iSmart Series Micro Data Center Solution, integrates UPS, air

Small intelligent micro-module data center

Product Description A solution specifically for the construction of small and micro data centers. All subsystems of the data center are integrated in the cabinet, which integrates power distribution,

Micro modular data center

In summary, ZTT micro modular data center is a complete and small data center that can be independently used for computing or storage resources.

Stulz: Micro Data center Micro DC STULZ Modular

The STULZ Micro DC is a server room in a rack and comprises all necessary infrastructure such as power, cooling, security, fire suppression, monitoring, and management. The unit will be integrated

Micro Data Center Cabinet Data Center Self-Contained

It integrates servers, storage, power, and cooling in one cabinet, reducing deployment space and simplifying installation, management, and maintenance. Ideal for SMEs, branch offices, and edge

FitDC Modular Data Center

The modular architecture can be easily assembled on-site to complete business delivery, which can save 50% of the delivery time and personnel investment compared to the traditional construction

Modular Server Rooms | Prefab Server Room | Panel Built

We offer custom modular server rooms in various sizes, layouts, and security features to fit your needs. Protect your IT infrastructure with a prefabricated modular server room. Climate-controlled,

Data Center Air Conditioning Systems | Vertiv Room Cooling

Discover a full range of cooling systems for your data center and computer room air conditioning technologies that save energy and water while simplifying deployment.

Computer Enclosure Room Modular Wall Systems

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These modular computer rooms and wall systems are pre-assembled, take advantage of quick set up, have raised flooring for easy access and cable management, include HVAC control for a constant

Vertiv Liebert MCR | Electronic Support Systems

The Vertiv Liebert Mini Computer Room (MCR) enclosure offers secure, air-tight, integrated cooling in a single rack enclosure.

Computer Room Air Conditioning (CRAC) for Data Centre | Canatec

We provide reliable computer room air conditioning (CRAC) systems for your server room facilities. Energy savings up to 30%. Multiple units LAN connectivity.

Computer room

As the need for computer equipment grows, so can the size of your computer room by simply unlocking the walls and adding more panels.

Foundation MCR

The Liebert Foundation MCR (Mini-Computer Room) is a rack enclosure with integrated cooling and optional UPS protection, designed to ensure the long-term viability of IT equipment or other critical

Micro Peltier Modules

Same Sky Micro Peltier Modules are miniature thermoelectric coolers offering precise temperature control. Same Sky Micro Peltier Modules offer compact package sizes with dimensions

MICROTHERM PANEL: Microporous insulation panels

MICROTHERM® PANELS are thin and lightweight insulation panels ideally suited for high temperature applications with limited available space.

Ultra-Low Temperature Freezer Features

Smarter cabinet design With over 80 years of experience in manufacturing ultra-low temperature freezers, you can be sure that every detail of our freezer cabinets has been optimized for

Liebert MCR

Liebert Cooling, Power Protection and Monitoring in a Secured Enclosure The Liebert MCR (Mini-Computer Room) is a self-contained rack enclosure system that includes a load-sized, computer

Micro Peltier Modules

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Same Sky''s micro Peltier modules offer compact package sizes with dimensions from 3.4 mm to 9.5 mm and profiles as low as 1.95 mm.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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