



INTEGRATED DATA CENTER

Professional Data Center Soution Provider



ANHUI COOLNET DATA POWER CO., LTD

Add: Building F1, Xingmengyuan Mansion, High-tech Zone, Hefei, Anhui Province, China
Tel: +86-0551-65568275 Fax: +86-0551-65568275
Website: www.coolnetpower.com

The name of Coolnet and logo are the registered trademark only for Coolnet.
©2024 by Coolnet company

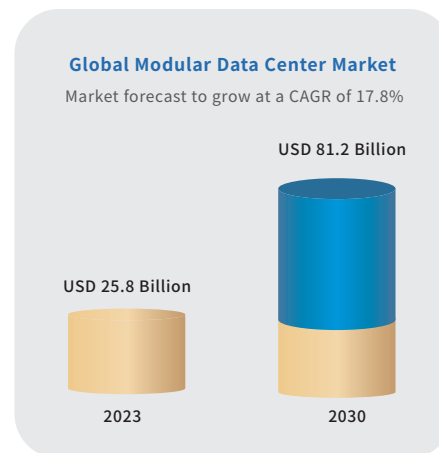
| Why Choose Coolnet

Modular Data Center Market >>

With the rapid development of technologies such as cloud computing, big data, and artificial intelligence, data centers will play an increasingly important role. As an emerging data center solution, micro-module computer rooms will become a new choice for future data center construction. It can not only meet the needs of enterprises for data center space, energy consumption, deployment speed, etc., but also improve the flexibility, reliability and manageability of data centers, helping enterprises achieve digital transformation and information construction.

Global Modular Data Center Industry Trends (globenewswire.com)

The global modular data center market is expected to grow from USD 25.8 billion in 2023 to USD 81.2 billion by 2030 at a Compound Annual Growth Rate (CAGR) of 17.8% during the forecast period. The market has excellent growth opportunities.



Coolnet provide leading, all-in-one data center solution that features enhanced protection, deep integration, and optimized configurations. Its modular design offers superior building adaptability. This highly integrated power, cooling, racks, cabling, and a management system within a single module, enabling rapid deployment and on-demand expansion. It is ideally suited for a wide range of scenarios, including enterprise, finance, government, and carrier data centers.

| Smart Modular Data Center Solution

Introduction >>



MetaRack Cabinet Data Center

Innovative integrated cabinet “One Cabinet One DC” design concept, fully enclosed design, plug and play. Key components are pre-tested, pre-installed, and pre-commissioned in the factory, implementing plug-and-play onsite and fast deployment.



MetaRack Computing Module

The MetaRack Computing MicroModule is a high-efficiency, energy-saving solution specifically engineered for high-density data centers across diverse application environments and installation conditions.



MetaRow Modular Data Center

The new-generation modular data center solution is dedicated to provide simple, efficient, and reliable infrastructure, enabling rapid deployment and on-demand scalability.



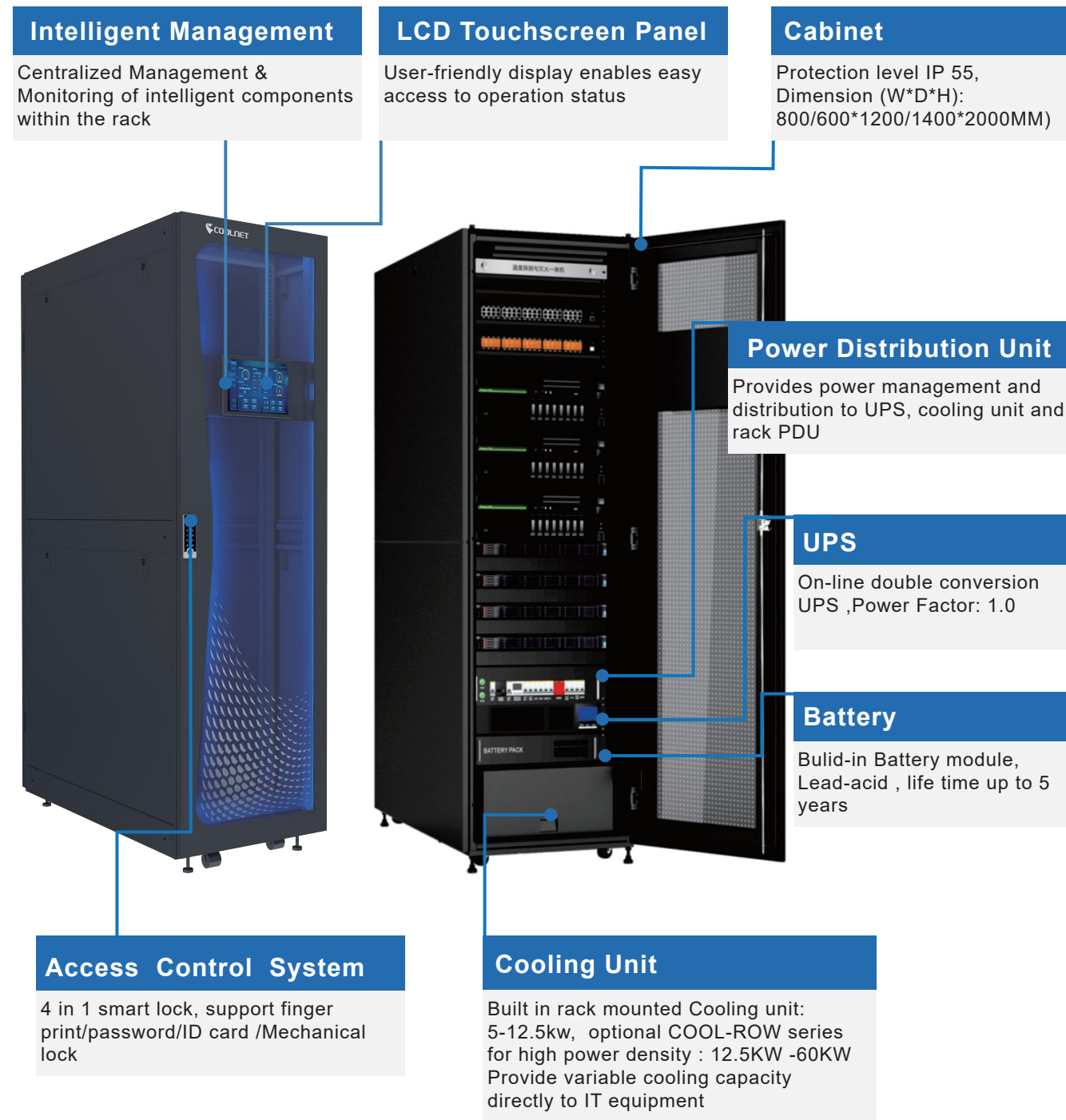
MetaCuber Container Data Center

Advanced outdoor and prefabricated all-in-one data center facility solution. The solution can be applied to multiple industries and scenarios and has simple, green, smart, and reliable features.

MetaRack Data Center

Introduction >>

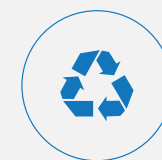
Coolnet MetaRack is a smart edge data center solution that integrates cooling, power, UPS, PDU, batteries, and an optional fire suppression system into a single cabinet. Its fully enclosed, compact design saves significant space. All components are pre-installed and tested in the factory, enabling rapid deployment and on-demand expansion. The built-in intelligent monitoring system allows for unified multi-site management, greatly improving operational and maintenance efficiency.



Application >>

- Finance
- Education
- Healthcare
- Public Security
- SMEs
- Retailing & Merchandising
- Edge DC, etc.

Features >>



Flexibility

All-in-one design, rapid deployment and Configurable on demand
All components pre-installed and tested in factory, true plug and play operation.



Intelligent Management

Realize unified management of multiple sites and significantly improve the O&M efficiency.

Support remote web and APP management

10inch touch screen enable easy access to operation status of equipment inside the cabinet



High Efficiency

Configured Variable frequency cooling solution, stable running without hot spots, 30% lower PUE compared with the traditional DC

Hot and cold aisle layout inside of cabinet , fully enclosed front door design highly improve the cooling efficiency and reduce the noise.



Security

4-in-1 Access Control System (Fingerprint + Password + ID Card + Mechanical Lock)

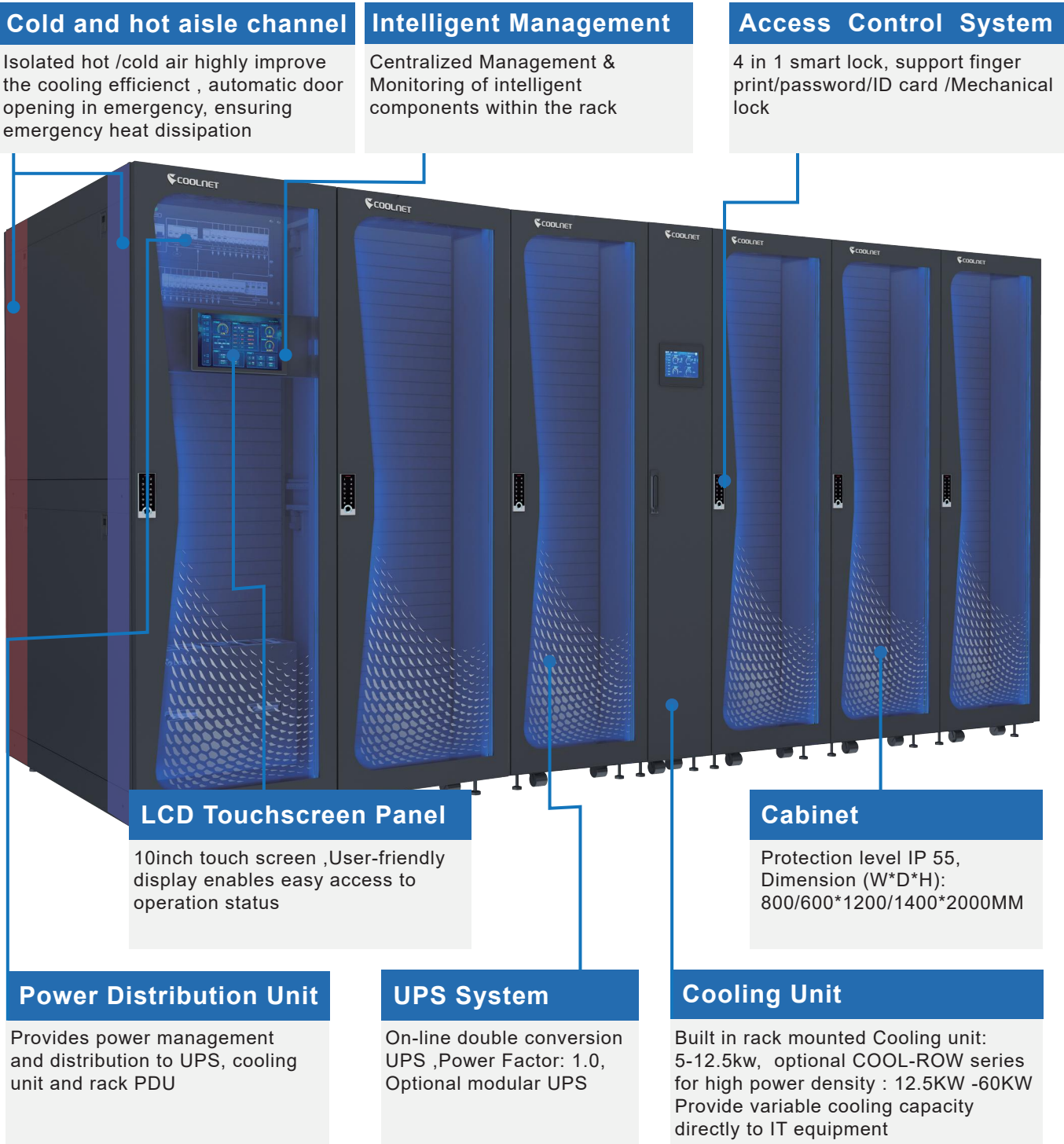
Optional fire suppression system inside the cabinet

Automatic door opening prevents overheating, configured s emergency Ventilation fan

MetaRack Cabinet Solution

Introduction >>

Supports multi-rack deployment with a power density up to 20kW per cabinet. The scalable design enables on-demand expansion, providing highly efficient system configurations to guarantee the stable and reliable operation of your data center.



Greener Future, 30% lower PUE compared with the traditional DC. >>

- ✓ Equipped with the high-efficiency COOL-ROW series full variable frequency cooling system , PUE value lower as 1.3.
- ✓ Full enclosed cabinet system , Cold and hot aisle containment, highly improve the Cooling efficiency
- ✓ Support N+1 cooling system backup , industry-leading modular UPS that delivers up to 98% power efficiency. providing highly reliable power supply and cooling.
- ✓ An energy-optimized free cooling solution, fluorine pump system utilizes natural cold sources to achieve a PUE as low as 1.2 in applicable low-temperature area.



Intelligent Management, Friendly User Interface >>

- ✓ The 10 inches touch screen displays the running status in real time.
- ✓ Multi-terminal support, via APP or WEB browser Securely authenticated access to the system
- ✓ Can display product energy consumption statistics and provide the last 12 months Trend graph of electricity consumption
- ✓ Standard monitoring interface, real-time monitoring of power distribution, UPS, temperature and humidity, smoke detection and other information to ensure stable operation

MetaRack Cabinet Solution

Typical Configuration



EC20
Cabinet:1*Combined Cabinet
UPS:3KVA Rack Type
Cooling:3.5kW Rack Air Conditioner
Redundancy:N



ER02
Cabinet:1*Combined Cabinet + 1*IT Cabinet
UPS:6KVA Rack Type
Cooling:6.5kW Rack Air Conditioner
Redundancy:N



ER03
Cabinet:1*Combined Cabinet + 2*IT Cabinet
UPS:10KVA Rack Type
Cooling:12.5KW In-Row
Redundancy:N



ER05
Cabinet:1*Combined Cabinet + 4*IT Cabinet
UPS:20+20(kVA) Rack Type
Cooling:12.5kW In-Row
Redundancy:N+1



ER07
Cabinet:1*Combined Cabinet + 6*IT Cabinet
UPS:30+30(kVA) Rack Type
Cooling:25.1+25.1 KW In-Row
Redundancy:N+1

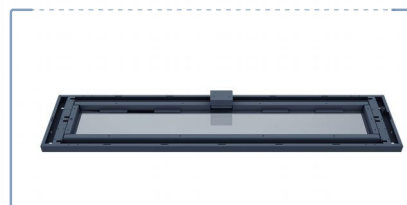
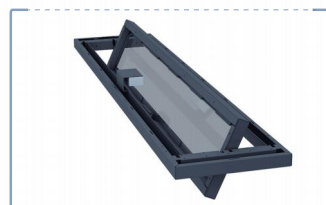
MetaRack Technical Parameter

Series		Specification			
System	Index	EC20	ER02	ER03	ER05
Power Supply and Distribution	UPS Capacity	3KVA	6KVA	10KVA	20KVA
	Power factor	0.8	0.8	0.8	0.9
	Total power input	220V/40A	220V/63A	220V/125A	380V/125A
	Height				
	Lightning protection	C class			
	Others	ATS Modle （optional）			
Cabinet	Recommended number of IT cabinets	1	2	3	5
	Available Space	28U	33U+42U	29U+2*42U	30U+4*42U
	Number Of Pdus In A Single Rack	1*8bit10A	1*12bit10A		1*(12bit10A+4bit16A)
	Closed Aisle	Fully enclosed cold and hot aisle			
	Ergency Ventilation	Fan-type emergency ventilation system, support maximum 5KW heat dissipation, automatic start and stop			
	IT Space Expansion	Standard IT cabinet with 42U usable space (optional)			
Refrigeration	Type	Rack Mount	In Row	In Row	In Row
	Cooling Capacity (KW)	3.5	7.5	12.5	2*12.5
	Sensible Heat Ratio	1			
	System	Compression system +EC fan			
Monitoring	Monitoring volume	UPS、 Power distribution、 AC、 Water leakage、 Temperature & Humidity、 Smoke、 Door sensor			
	Function	Data collection and storage, alarm management, energy consumption analysis, remote access, sound andlight alarm (optional), SMS alarm (optional), APP (optional)			
	Display	10-inch Touch screen			
Fire	Heptafluoropropane	1URack-mounted gas fire extinguishing system (optional)			
Battery	Standard Number Of Batteries	8	16	16	20
	Backup Power For 15 Minutes	2UBattery Pack	3UBattery Pack	—	6UBattery Pack
	Backup Power For 40 Minutes	—	—	—	External 20 100A/12V
	Backup Power For 90 Minutes	—	—	—	—
	Longer Time Delay	Can be replaced with high-capacity batteries or increase the number of battery packs (not more than 4)			
Size	W*D*H-mm	600*1200*2000	1500*1200*2000	2100*1200*2000	3600*1200*2000
Environment	Environment Temperature	0~45℃			
	Environment humidity	Relative humidity 0-95%, no condensation			
	Altitude	<1000m, The excess part is derated according to relevant standards			

MetaRack Computing Module Solution

Introduction >>

Coolnet MetaRack Compute module is designed for high-density computing centers, it supports a power capacity of 22–45 kW per rack. Through dynamic cooling and hot/cold aisle containment, significantly improve cooling efficiency. with Modular component design, it enables rapid deployment, simple installation, and reduced space footprint. AI self-diagnostics, self-learning operation, and an intelligent monitoring and alarm system for easy operation and maintenance.



Applications >>

High-density HPC supercomputing in universities and research institutes.

High density data center for government, scientific research, healthcare, education, finance, and administrative institutions.

Features >>



Flexibility

- Modular design, one-stop fast deployment, flexible expansion.
- All components pre-installed and tested in factory, Highly integrated design, space saving by 50%



Reliability

- Advanced design concept for High-density computing centers, delivers stability and long-term reliability.
- Features strong site adaptability, modular component design, simplified installation, and a small footprint.



High Efficiency

- Supports free cooling by utilizing outdoor natural cold sources to achieve high cooling efficiency, with an annual PUE lower to 1.2.
- Patented Free Cooling technology with fluorine pump heat pipe system achieves 40%-70% energy conservation.
- Hot and cold aisle layout, avoid the mixing of hot and cold air and improve the cooling efficiency in the module



Intelligent Management

- Realize unified management of multiple sites and significantly improve the O&M efficiency.
- Support remote web and APP management.
- Intelligently AI operation to real-time indoor and outdoor temperature and power load, to reduces the energy consumption.

MetaRack Computing Module Solution

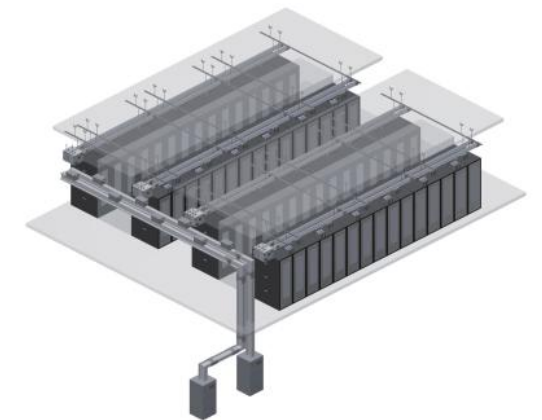
Introduction >>

This high performance computing module is specifically designed for high-density data centers operating in various application and installation conditions. Featuring multiple operational modes, it effectively accommodates the airflow management requirements of different computer room layouts. Through dynamic cooling, hot/cold aisle containment, and precision control, the module significantly enhances cooling utilization while reducing energy consumption associated with localized overheating and high-density heat dissipation.



High-Reliability Power Distribution Track-Type Intelligent Busbar

The Intelligent Busbar System is a precise power distribution solution with intelligent temperature monitoring and power metering systems. which is seamlessly adaptable, supporting various configurations such as AC single-phase, AC three-phase, and DC output. Furthermore, it can be equipped with for real-time oversight.



Comprehensive Monitoring: Intelligent management for Power, Environment, and Security

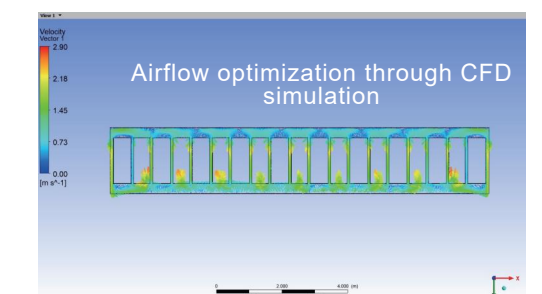
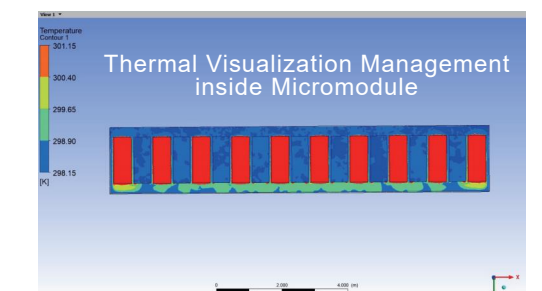
Deploying intelligent management system, enables real-time remote monitoring and management via SMS and APP, Integrated fire alarm control, and data logging with analytics. This provides holistic, 24/7 online oversight and intelligent management.



Energy saving, PUE lowered to 1.2

Patented Free Cooling technology with fluorine pump heat pipe system achieves 40%-70% energy conservation.

Seperated hot/cold airflows to improve the cooling efficiency in the module and optimized airflow management.



MetaRow Modular Data Center

Introduction >>

Coolnet's Meta Row data center solution adopts a modular design, our solution is tailored to your unique specifications, from power density and Tier standard to reliability and PUE, providing exceptional foundational support for your critical IT infrastructure.



Closed Aisle >>

Modular Design

Adopting modular design concept, each unit can be installed and disassembled independently, and can be closely connected with adjacent units, which is convenient for disassembly and assembly; at the same time, it is also suitable for maintenance and management of other equipment on the channel.

Good Sealing

All unit modules in the hot and cold aisle system are connected precisely, and the parts are sealed with good sealing tops or sponge strips, which not only maintains the aesthetics, but also prevents the leakage of cold air in the cold aisle.

Light Transmission

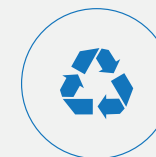
The system is composed of toughened glass with strong light transmittance.

Applications >>

It is suitable for small and medium data centers with power consumption less than 180KW and an area of less than 100 square meters.

Through the flexible arrangement of multiple modules, it is applicable for a large-scale data center with low requirement of room height and construction, such as IDC, large enterprises, financial centers, governments, military, supercomputer centers, education, medical and other industries.

Features >>



High-efficiency

- Power supply and distribution architecture, close to heat source cooling methods, effectively reduce the module PUE value;
- Closed channels isolate hot and cold air flows, eliminate ineffective air circulation and eliminate local hot spots;
- Module integrated management, coordinated operation, and effectively improves the efficiency of functional module components;



Rapid Deployment

- Standardized components, de-engineering, and overall delivery;
- Factory prefabricated and pre-commissioned, plug and play on site;
- According to business development on demand matching, rapid expansion;



Simple and Reliable

- Productization of data center infrastructure to reduce the impact of construction technology and improve system reliability;
- Product-level factory inspection to obtain higher quality assurance;
- Strong adaptability, suitable for various onsite conditions of users;



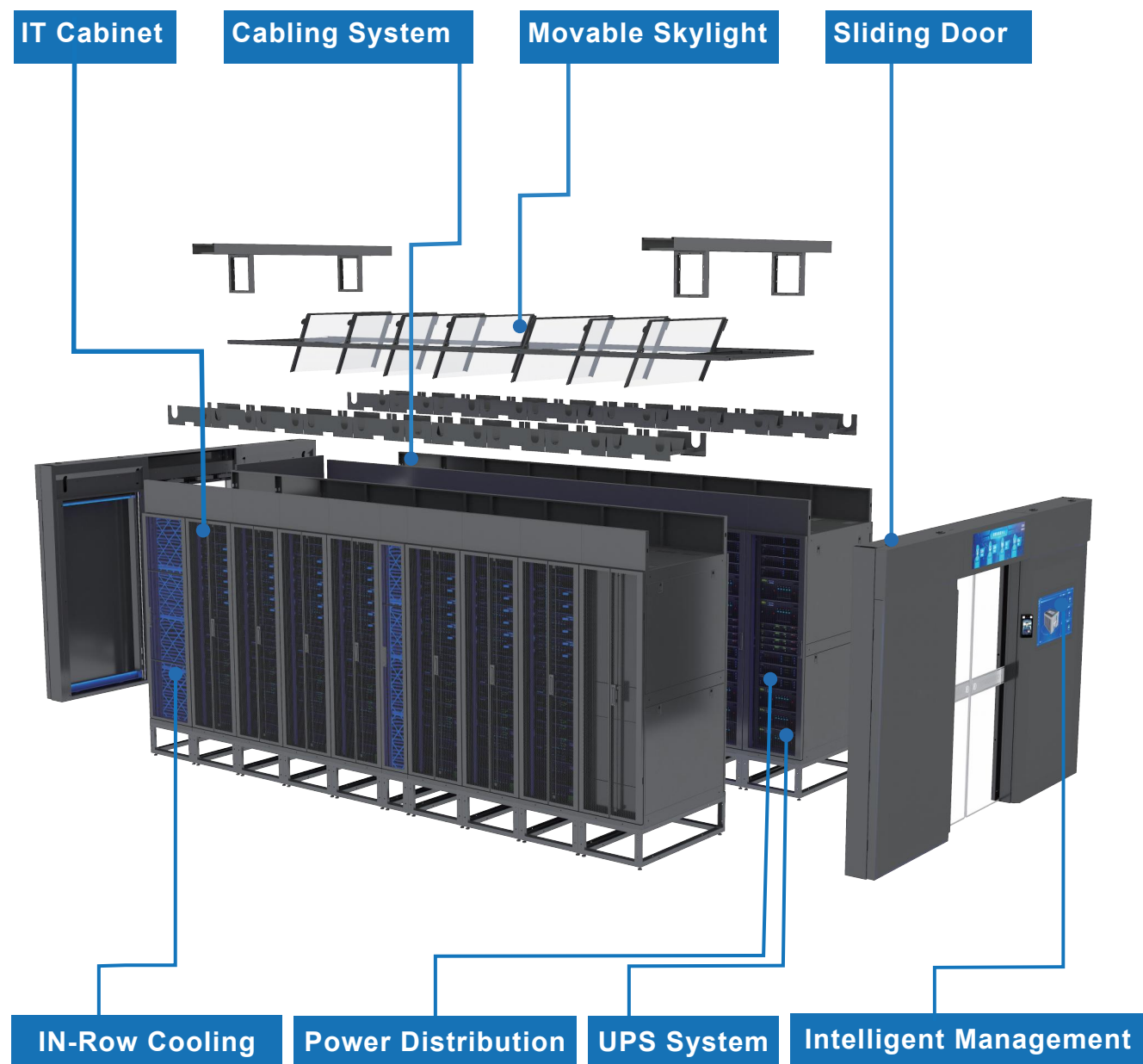
Intelligent Management

- Integrated and integrated design of refrigeration, power distribution, dynamic circuit and cabinet;
- Standardised solutions, de-engineered;
- Accurate energy efficiency management, PUE real-time display, power consumption is clear;
- Remote cloud operation and maintenance management platform.

MetaRow Modular Data Center solution

Introduction >>

A new type of data center with small foot print and flexible expansion can effectively meet customers' requirements. Highly integrated solution which comprises power supply, cooling, rack & structure, cabling and management system within a module, meeting the requirements for quick delivery and on-demand deployment.



System Configuration Details

Power System

- UPS /BATTERY : Inside / outside the module
- Modular Ups : 250 -600kVA
- Integrated power distribution unit with UPS
- PDU , Busbar trucking



Cooling System

- Cool -Row Series: 12.5-60kW Inrow Cooling system
- Cybermaster Series:20-200kW CRAC Cooling system
- Free Cooling : Fluorine Pump free cooling : 12-120KW
- HyperCool liquid cooling : 50~500kW



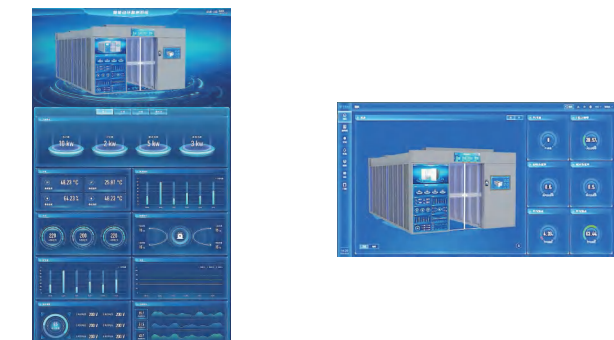
Rack and Cold Aisle Channel System

- Server Rack : 600*1200*2000mm
- Network Rack : 800*1200*2000mm
- Cold Aisle : 1000-1200mm



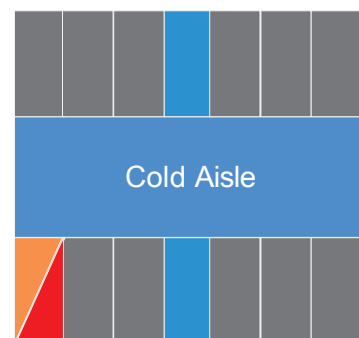
Intelligent management

- Security :Video Surveillance/3 in 1 Access Control
- Friendly user interface : 43inches touch screen, 3D view clear display
- Centralized Management: simplified O&M management, Space, Power, Cooling status visualization,



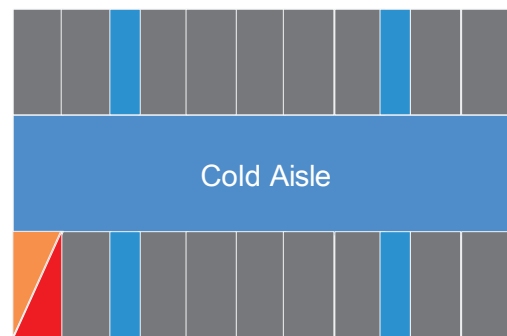
MetaRow Modular Data Center

The one-stop solution for sustainable digital efficiency and protection



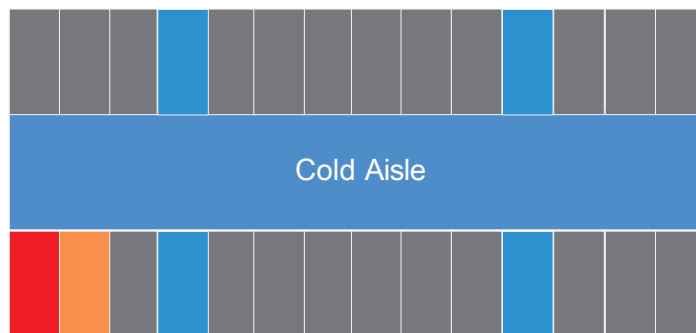
MR-60-R12

- IT Rack:12 Sets
- IT Power:60KW
- Cooling: 2* 63.9KW
- UPS:90KVA
- Redundancy:N + 1



MR-90-R18

- IT Rack:18 Sets
- IT Power:90KW
- Cooling: 4* 31.1KW
- UPS:150KVA
- Redundancy:N + 1



MR-120-R24

- IT Rack:24 Sets
- IT Power:120KW
- Cooling: 4* 53.3KW
- UPS:150KVA
- Redundancy:N + 1

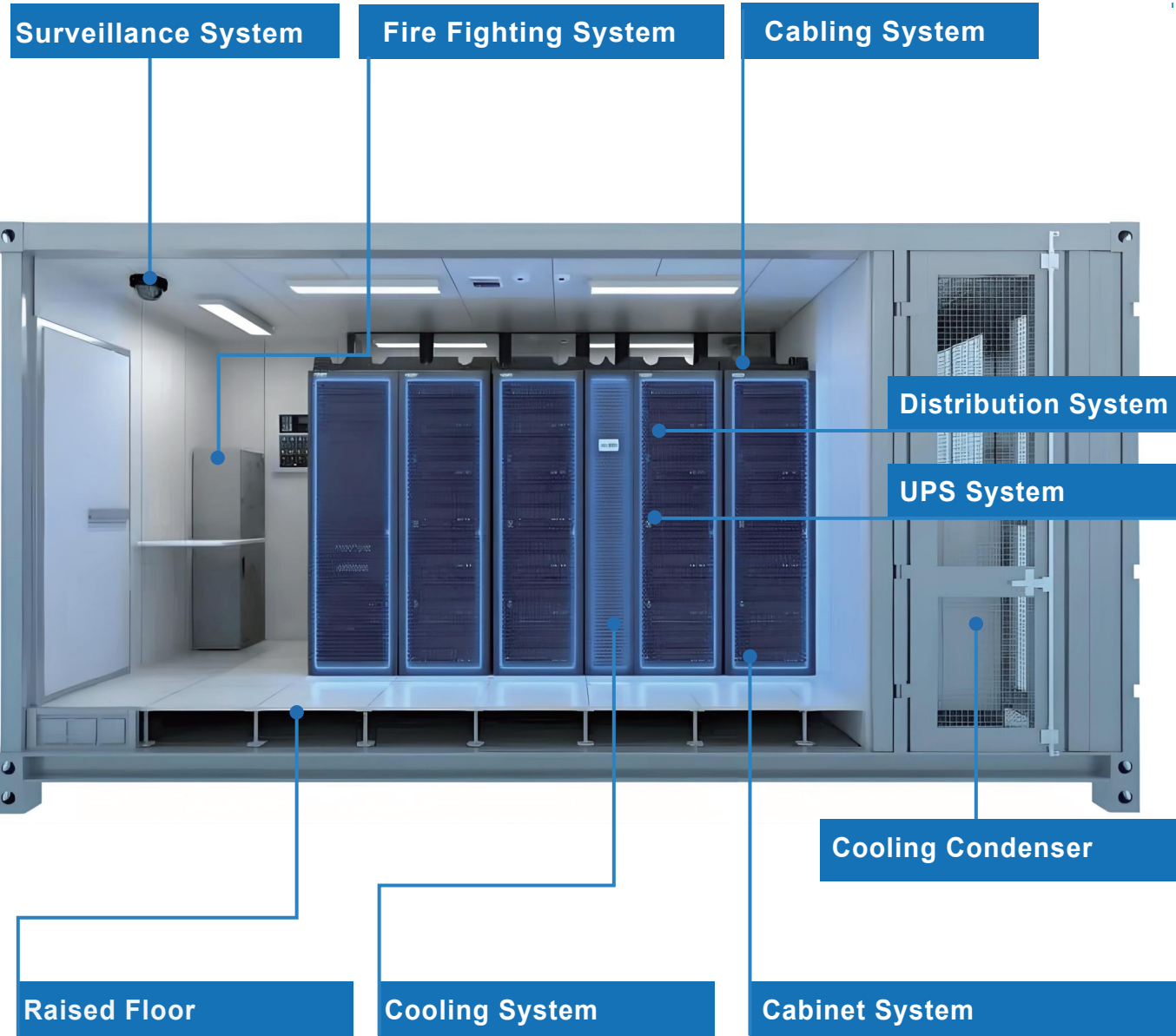
MetaRow Technical Parameter

Model		MR-60-R12	MR-90-R18	MR-120-R24	Configured
Technical Parameters	IT Rack No.	12	18	24	Per Definition
	Rack Power Density/Rack	5	5	5	Per Definition
	Total IT Power-KW	60	90	120	Per Definition
	Redundancy	N+1	N+1	N+1	T1 ~ T4
	Width-mm	3600	3600	3600	Per Definition
	Depth-mm	2991	2991	6058	Per Definition
	Height-mm	2000	2000	2000	Per Definition
	IP Level	IPX0	IPX0	IPX0	IPX0
	Input Power	380-415V/3P/50-60Hz			
Power Section	UPS -KVA	75kVA (5*15kVA)	125kVA (5*25kVA)	150kVA (6*25kVA)	3 ~ 600kVA
	UPS Mount Type	Rack-Modular	Rack-Modular	Rack-Modular	Rack/Floor
	Standard UPS Battery	VRLA 15min @60kW	VRLA 15min @90kW	VRLA15min @120kW	Lithium/VRLA
	AC PDU	Smart/Basic PDU	Smart/Basic PDU	Smart/Basic PDU	Per Definition
	-48VDC-A	Optional	Optional	Optional	10-600A
	48VDC Battery	Optional	Optional	Optional	<= 4 hour
	48VDC PDU	Optional	Optional	Optional	Per Definition
Cooling Section	Cooling Type	Inrow Split DX	Inrow Split DX	Inrow Split DX	Inrow/CRAC
	Mount Type	Row	Row	Row	Row/Room
	Capacity-kw	2x 65.7kW	4x 31.1kW	4* 51.2kW	5 ~ 200kW
DCIM Section	Local Display	Touch Screen			
	Remote Access	Web/SMS/Email			
	Reporting Protocol	Modbus/SNMP			
	UPS Mgmt.	Yes	Yes	Yes	Yes
	Cooling Mgmt.	Yes	Yes	Yes	Yes
	Temperature & Humidity Sensor	Yes	Yes	Yes	Yes
	Fire Sensor	Smoke	Smoke	Smoke	Smoke
	Water Sensor	Yes	Yes	Yes	Yes
	Door Sensor	Yes	Yes	Yes	Yes
Security Section	Access Control	RFID/Pin/Finger			
	Video Surveillance	Yes	Yes	Yes	Yes
Fire Fighting Section	Fire Extinguisher	Optional	Optional	Optional	Optional
	Early Detection	Optional	Optional	Optional	Optional

MetaCube Container Solution

Introduction >>






MetaCube is an advanced outdoor and prefabricated all-in-one data center facility solution, applied to multiple industries and scenarios , a ISO standard 20FT and 40FT containerized data center integrated power distribution, cooling management, cabinets, monitoring, and fire suppression subsystems. All infrastructure is fully prefabricated and pre-tested in the factory . On-site rapid deployment and true plug-and-play operation. The container has excellent protection capabilities and can be adapted to various outdoor application scenarios, supporting direct outdoor deployment and long-term reliable operation with excellent seismic, wind, dust, and water resistance.



Application >>

- ▶ Enterprise: Small Data Rooms
- ▶ Government: Smart City & Safe City Data Centers
- ▶ Education: University / Research Institution Data Centers
- ▶ Energy: Data Centers for Production & Exploration Sites
- ▶ Finance: Disaster Recovery Data Centers
- ▶ Transportation: Power Supply Solutions for Airport, Rail, and Port Sites without Dedicated Rooms
- ▶ Telecom Operator: Small IT Rooms, Compact IDCs, DR Rooms, and Edge Data Centers

Features >>

 <h3>Flexible Expansion</h3> <p>Configurable on demand, capable of meeting enterprise data center expansion needs at any time.</p>	 <h3>Rapid Deployment</h3> <p>Containerized design for easy relocation, all equipments prefabricated and tested, quick deployment and true plug and play operation</p>
 <h3>Energy Saving</h3> <p>Low PUE value, enclosed hot and cold aisles, intelligent cooling management, significantly improve energy efficiency and reducing carbon emissions and environmental protection.</p>	 <h3>Intelligent Management</h3> <p>Intelligent monitoring system to enhance equipment reliability, reduce the number of maintenance personnel and improve maintenance efficiency.</p>
 <h3>Reliability</h3> <p>25-year cabinet service life, compliant with GR-63-CORE Zone 3 seismic standards , Standard 60-minute fire resistance for external sheathing structures (structural walls)</p> <p>IP65 protection rating, wind resistance up to Scale 12, capable of outdoor operation from -40°C to +55°C.</p>	

MetaCube Container Data Center

With its highly professional R&D and manufacturing capabilities, Coolnet can customize container data center for customers. Including system availability, protection capabilities, cabinet size, power supply system, cooling type and other special requirements.



Technical Parameters

Model		MCDC20-28KWR4-TII	MCDC40-72KWR9-TIII	MCDC40-120KWR8-TIII
Item				
Entire system parameters	Tier level	T2	T3	T3
	Power supply	380/400/415V 50/60Hz, 3phase.four-wire+PE	380/400/415V 50/60Hz, 3phase.four-wire+PE	380/400/415V 50/60Hz, 3phase.four-wire+PE
	Altitude range	Maximum altitude: 3000m (Power derating occurs when altitude ≥1000m)		
	Operation Temperature and Humidity range	-40℃~+55℃/ 5%-95% RH		
	Total power Density	28KW	72KW	120KW
	Sever Racks quantity	4pcs	9pcs	8pcs
	Sever Rack dimensions (W×D×H)	600*1100*2000MM	600*1100*2000MM	600*1100*2000MM
	Waterproof & dustproof	IP55 (Customizable IP65)	IP55 (Customizable IP65)	IP55 (Customizable IP65)
	System design life	10 year	10 year	10 year
	Container Service Life	25 year	25 year	25 year
Structure parameters	Dimensions(W×D×H)	6058mm*2438mm*2896mm	12192mm*2438mm*2896mm	12192mm*2438mm*2896mm
	Internal dimensions (W×D×H)	5760mm*2350mm*2500mm	11898mm*2350mm*2500mm	11898mm*2350mm*2500mm
	There is a transition lobby	No	No	No
	Thermal insulation performance	≤0.36W/(m²×K)		
	Fire resistance	External structure 60-minute		
	Cable routing mode	Cables can be routed in from the bottom or end		
	Aisle dimensions	Cold aisle: ≥ 650 mm; Hot Aisle :maintenance aisle: ≥ 500 mm		

Technical Parameters

Power supply and distribution	Power input range	380/400/415V±10%	380/400/415V±10%	380/400/415V±10%
	Input current	100A	225A	630A
	Total input surge protection	Equipped with a Class B surge protector, with a maximum discharge current of not less than 40kA		
	Input Channel	2channels	2channels	4channels
	Power distribution cabinet	1pcs	2pcs	2pcs
	Top high-voltage cable tray	1set	1set	1set
	PDU	Each cabinet is equipped with 2 sets, featuring 63A 1P input and customizable output ports based on customer requirements		
	UPS Model and Quantity	1 unit of 60/15KVA, with 3 power modules (2 main, 1 standby)	1 unit of 90/15KVA (6 power modules); 2 UPS units mutually redundant	2 units of 180/30KVA (5 power modules each); 2 UPS units mutually redundant
	UPS Power Capacity	Actual Power: 45KVA	Actual Power: 90KVA	Actual Power: 150KVA
	Battery Cabinet Quantity	1	2	2
	Battery Type	Lead-Acid Battery (Lithium-Ion Battery optional)	Lithium-Ion Battery	Lithium-Ion Battery
	Backup Power Duration	15minutes	15minutes	15minutes
	Battery Specification and Model	32*12V65AH	512V50AH (1)	512V100AH (1)
Cooling System	Cooling capacity	30kW/unit (1+1 redundancy)	40kW/unit (2+1 redundancy)	50kW/unit (3+1 redundancy)
	DIMENSION (W*D*H)	300mm*1100mm*2000mm	600mm*1100mm*2000mm	600mm*1100mm*2000mm
	Compressor Type	Dc inverter (Mitsubishi)		
	Air Volume	5800m³/h	8500m³/h	10000m³/h
	FAN	EC FAN (EBM)	EC FAN (EBM)	EC FAN (EBM)
	Refrigerant	R410A	R410A	R410A
	Temperature / humidity control range	20-45℃ 20%-80%	20-45℃ 20%-80%	20-45℃ 20%-80%
	Refrigerant Liquid/ Gas Pipes	16/22mm	16/22mm	16/22mm
	Condenser			
DCIM Monitoring system	Container access control	IC card access control		
	Video surveillance	Yes	Yes	Yes
Fire extinguishing System	Automatic gas fire extinguishing system	Yes	Yes	Yes
	GAS Type	Heptafluoropropane	Heptafluoropropane	Heptafluoropropane
	Very Early Smoke Detection and Alarm	Optional	Optional	Optional
	Fire resistance	Fire Resistance Rating Exceeding 60 Minutes		

PGM Series Modular UPS Power Supply System

The PGM series modular UPS is designed for use in medium and large data centers to achieve maximum availability. This series adopts the latest three-level technology and PFC input control technology to ensure 96% high efficiency and ultra-reliability. It is an ideal choice for medium and large data centers and critical loads.



Features >>

- Fully digital control, flexible and robust.
- 7&10 inch touch LCD,with IoT functions
- High reliability and environment adaptability, with protection of components level
- Intelligent system self-diagnosis, rich fault recording, large capacity of history recordstorage space
- Maximum system capacity up to 1.8MVA, the best solution for mega data center

Power Module >>



Module	Parameters	Dimensions (D*W*H mm)	Weight (kg)
SUB20K	3P/3P 20KVA/20KW	650*440*132(3U)	34
SUB30K	3P/3P 30KVA/30KW	650*440*132(3U)	34.5

High Efficiency Cooling System

Room Cooling

CYA Room-Based Air-cooled Air Conditioner provides precision temperature and humidity control for large and medium-sized data rooms. It adopts a highly efficient compressor and EC centrifugal fan to meet the requirements of 24x7 all-weather continuous operation. It is the ideal choice for green and energy-saving data centers and various electronic equipment rooms.



In Row Cooling

The combination of closed cold aisle system and In Row air conditioning has the following characteristics The cold air is enclosed in the cold aisle and passes through the equipment , so that the cold capacity is fully utilized; More stable air supply;Reduce ineffective air flow and reduce equipment energy consumption Appropriately increasing the supply air temperature can improve the efficiency of the unit;



Cold Plate Liquid Cooling

Coolnet HyperCool Liquid Cooling Solution achieves an exceptionally low PUE of 1.1. Specifically designed to solve thermal challenges in ultra-high density cold plate liquid cooling servers, this advanced system features the Heat Exchange Unit (CDU) as its core component. The CDU primarily facilitates coolant circulation within the liquid cooling system while enabling efficient heat transfer between the external cooling water circuit and secondary coolant loop, along with precise cooling management and distribution.



| All-in-One Intelligent Power Distribution

The All-in-one intelligent power distribution system of Coolnet Digital Energy Data Center is a new generation of highly integrated power supply and distribution system adapted to modular data centers based on the new intelligent modular UPS platform. It integrates UPS host, IT power distribution, air conditioning power distribution, lighting power distribution, Mains electricity ATS, UPS input power distribution and UPS output power distribution into one cabinet, and has the characteristics of simple and easy maintenance, high reliability and high efficiency, it can provide safe, stable and pure green power supply for data center load.



Features >>

Extreme Power Density

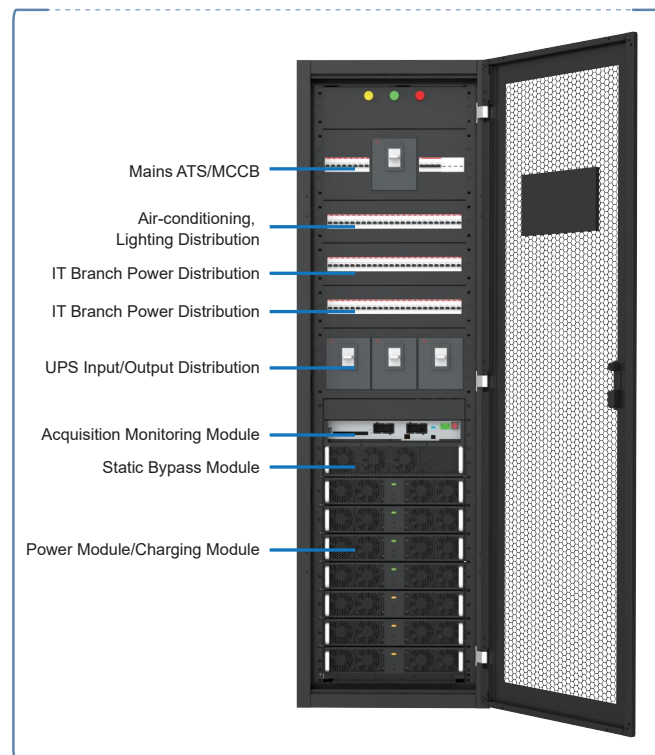
- The maximum support is 180kVA integrated UPS power supply and distribution, with industry-leading power density. Built-in 30kVA/30kW module, height is only 2U, system capacity supports phased deployment, power module and bypass module can be quickly replaced for easy maintenance.
- UPS, UPS input and output cabinet, precision distribution cabinet, three cabinets in one save 68% of floor space and save more than 55% of installation time.

Green, Energy-saving and Efficient:

- System efficiency is up to 96%, energy efficient.

Intelligent Safety Monitoring

- Intelligent detection of power distribution branches and full display of power supply links
- One screen, one system integrated management of power distribution, UPS and battery information.



| Cabinet System

Multi-functional cabinet developed for large, medium and small data centers. It has the advantages of sturdy structure, strong load-bearing capacity, noble and elegant and assembling structure design. Cabinet integrated three major solutions (power management solution, cable management solution, heat dissipation management solution), It can be used as a modular equipment installation infrastructure, cabinet-type power distribution cabinet, rack mounted battery box, Cabinet integrated user equipment, power distribution, UPS, battery box, and monitoring system, greatly save the equipment area in the computer room.



Features >>

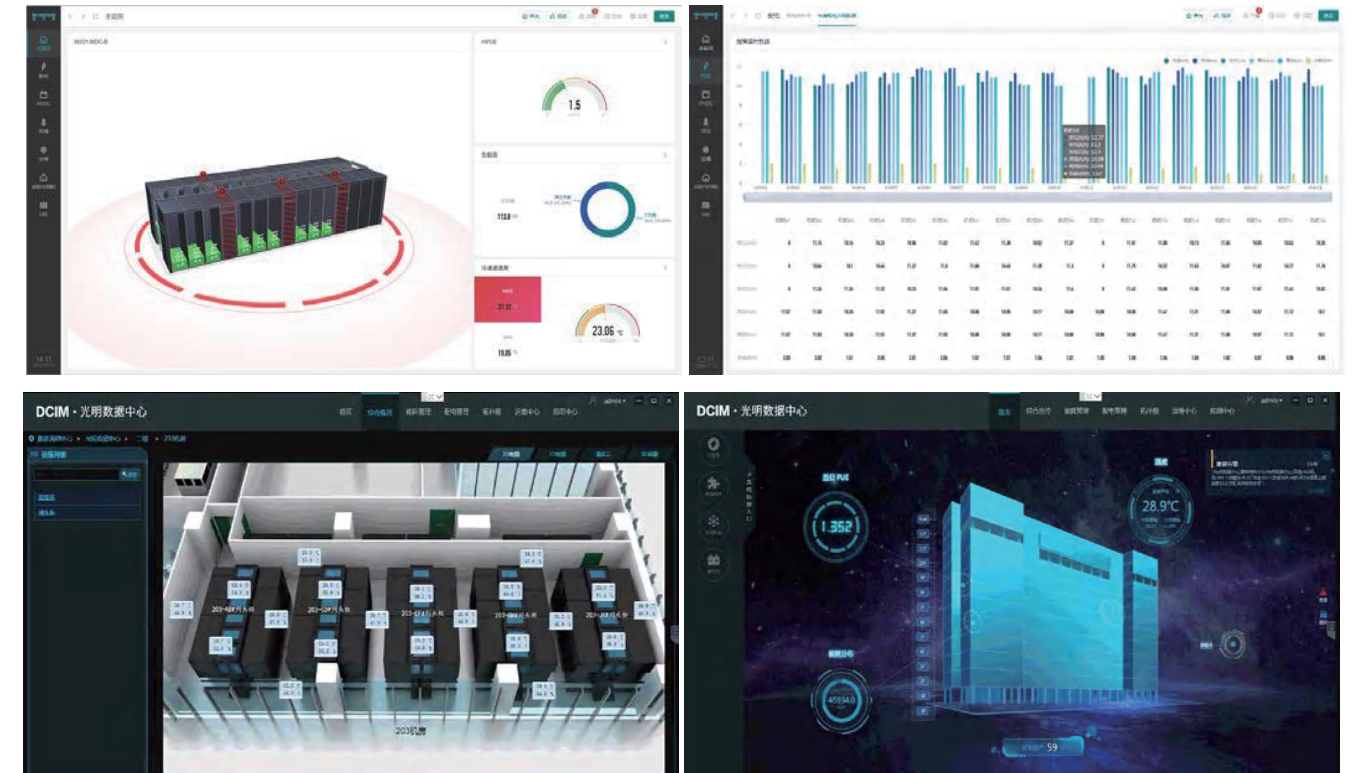
- It adopts a 10-fold profile welded frame structure with high strength and a static load of 1800KG.
- The flat high-density hexagonal mesh door enhances ventilation and heat dissipation, meets the requirements for mechanical protection and external observation of equipment operating status, with a ventilation rate of 75%.
- Integrated assembly structure design, the U-pillar for equipment installation can be adjusted front and back, making it easy to install other power distribution modules, with a static load of 1800KG.
- Various sizes, width 600/800mm, depth 600~1200mm, height 42/47/52U optional.
- Rich optional accessories: PDU, blind panels, shelves, L-shaped guide rails, cable management boards, cable troughs, ventilation fans, electronic access control, ambient lights, etc.
- The surface of the cabinet is degreased, phosphated, and electrostatically sprayed to ensure that the cabinet is strong, reliable, and resistant to acid and alkali corrosion.

Intelligent DCIM Management System



Monitoring Host

- The monitoring host uses Cortex-A8 CPU chip, 1G memory, and 8GFlash storage.
- Highly integrated monitoring software and hardware products, with high integration and rich interfaces, various monitored equipment and sensors can be installed directly through plug-in terminals, plug-and-play, and easy to construct.
- Supports dual 220V AC power supply.
- Support ZigBee wireless collection extension.
- Can support 4G wireless transmission expansion plug-in module.
- Optional SMS alarm module and phone voice alarm module are available.
- Full RJ45 interface design, unified standard, interface with power supply, simple and convenient wiring.
- The bottom hardware is photoelectrically isolated, has strong antinterference and has lightning protection function.



Features

- Centralized Monitoring**
 Multiple computer rooms are connected to the Internet, with centralized access to power, environment, refrigeration, security and other equipment for unified real-time monitoring;
- Remote Access**
 Client, browser, APP, convenient for users to access the system at any time and obtain the monitoring status of the computer room at any location;
- Fault Warning**
 Multi-level flexible threshold strategies, timely reminders before equipment failure, to minimize the occurrence of faults and alarm storms;
- Alarm Notification**
 Multi-channel alarm notification, flexible combination of sound and light, SMS, phone and email notification, and hierarchical push notification strategy, so that stakeholders can know the fault in time;
- Energy Efficiency Statistics**
 Supports automatic calculation and real-time display of the PUE index of the computer room, and provides energy consumption analysis data.
- 3D Display**
 It has the function of automatic slide show of 3D configuration diagram of the computer room. No mouse click is required. The software automatically plays the real-time status of each room.