



# MetaRack Micro Data Center



**HEFEI COOLNET 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](http://www.coolnetpower.com)

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# Company Profile

Coolnet focuses on the R&D, production, and application of data center integrated solutions. As technical consulting, product supply, system integrator, and service provider, it is committed to serving customers in the fields of communication equipment rooms, data centers, smart construction, and energy management.

Our solutions include data center temperature, humidity, and energy-saving solutions, small and medium-sized computer room temperature control solutions, micro-module data center solutions, micro-module cabinet solutions, container, and modular data center solutions, communication outdoor cabinet temperature control and energy saving Solutions, cabinet temperature and humidity, and energy-saving solutions.

Has rich research and manufacturing experience in the field of data center equipment, with world-class laboratories, production testing equipment, and a complete line of key equipment rooms. And passed the ISO9001 quality management system certification, ISO14001 environmental management system certification, and the products have passed CE certification, CCC certification, CQC certification, CRAA quality certification, etc.

We are committed to "paying attention to customer needs and realizing customer value" and establishing a win-win cooperation pattern with customers. To become your most trustworthy, most grateful, most professional, most practical, and most reliable partner with the best vision. We will "make every effort to provide value for money products and services to make customers more competitive", and continue to explore and innovate.



# MetaRack Data Centers

## Product Description

Coolnet Cabinet Data Center is an integrated cabinet which contains cooling system, power system, monitoring system and rack system, etc.. There are more and more micro data centers, and it has been facing the dilemma that it is difficult to unify the planning, construction and operation management. The integrated cabinet deeply integrates data center infrastructure products, including multiple subsystems such as UPS, power distribution, refrigeration, cabinets, and fire protection, and implements overall management of the entire system through the monitoring system.



## Applications

- ▶ Business outlets (Industry like: telecommunications, finance, energy, radio and television, retail...)
- ▶ Small enterprises Branches and networks of large enterprises, government, education, Healthcare Edge Data Center





# Product Advantage



## ▼ Efficiency

- The cold and hot aisles at the front and rear of the cabinet are closed to improve the cooling efficiency of the air conditioner.
- Inverter compressor, matching the load size, reducing the energy consumption of the whole machine.



## ▼ Stable and Reliable

- Emergency fan as emergency cooling.
- The power supply adopts 2N architecture.
- The ultra-wide voltage input operates stably, and has power protection functions such as phase sequence detection.
- Low temperature components or long connecting pipe components can be selected to ensure reliable operation.



## ▼ Intelligent management

- One-stop after-sales service can deal with various equipment failures in a timely manner;
- Standard dynamic monitoring system, providing various reports and data statistics, local and remote monitoring and management, and multi-point access to the upper management platform Unified supervision and support for diversified choices.



## ▼ Simpler

- Integrated design, integrate UPS, battery, power distribution, air conditioning, monitoring, wiring, fire protection and other products in the cabinet, get rid of the traditional sub-item construction mode; modular design, unified interface of each component, fast on-site.

# Monitoring Systems



## Edge Brain Infrastructure monitoring

### ▶ Excellent User Interface

The 10 inches touch screen displays the running status in real time

### ▶ Comprehensive Monitoring

Standard monitoring interface, real-time monitoring of power distribution, UPS, temperature and humidity, smoke detection and other information to ensure stable operation

### ▶ Energy Management

Can display product energy consumption statistics and provide the last 12 months Trend graph of electricity consumption

### ▶ Multi-terminal access

Multi-terminal support, via APP or WEB browser Securely authenticated access to the system



## Edge Brain Equipment monitoring

- Monitoring of the operating status of IT equipment is available on request.
- The customer has to provide the communication protocol of the IT equipment to be monitored.





# Product Features

## EC20 product



# MetaRack Cabinet Solution

## ER series products



## Cabinet system

- IP5X fully enclosed cabinet, cold and hot channel isolation
- Up to 30U of usable internal space
- 10.1 inch 0U monitoring all-in-one machine
- Full load noise  $\leq 49\text{dB}$

## Power supply and distribution systems

- 3-30KVA capacity available
- Rack mountable
- Power back-up time on demand (15-120m)
- ATS dual input switching (optional)
- Industrial grade devices with built-in Class C lightning protection
- Comprehensive monitoring, real-time power display

## Refrigeration system

- 3.5-10.5KW cooling capacity, accuracy  $\pm 0.5\text{ }^\circ\text{C}$
- Inverter compressor + double EC fan. PUE $\leq 1.4$
- Whole machine noise  $\leq 49\text{dB}$
- Low load anti-condensation technology
- N+X redundant group control

# MetaRack Technical Parameter

Series		Conventional Air Conditioning Version			
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	4U	4U	4U	6U
	Lightning protection	C class			
	Others	ATSModle (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 and light 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°C			
	Environment humidity	Relative humidity 0-95%, no condensation			
	Altitude	<1000m, The excess part is derated according to relevant standards			



## Customization

Multiple sizes can be customised to meet different customer requirements

## Deliverability

Complete machine for transport. Plug and Play

## Quality Assurance

High-quality design, high cost performance



## Rapid deployment

In planning and design in strict compliance with international standards, the use of Modular design, high degree of integration, easy to install

