



“Module Cube” Modular Data Center Solutions



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COMPANY PROFILE

Established in 1989, 2.329 billion CNY registered capital, East is an Excellent Listed Company (stock code 300376) and a global 5G+ Digital Industry and Smart Energy System Solutions Provider. As a focused high-tech enterprise in The Nation Class Lighted Torch Plan, East is National technology innovation demonstration enterprises, Global Top 500 new energy enterprises, and the Winner of National May 1st Labor Award. With 268 representative offices around China, East's service has spread in more than 140 countries' partners and customers around the world.

Innovative strength

Relying on 4 Technological Platforms including National-recognized enterprise technology center & Post-doctoral technology research workstation, conducted by 4 R & D centers in Dongguan, Chengdu, Nanjing, Xi'an city, East owns 740 Patents at home and broad, honored with China Patents Excellence Award, TOP 100 Innovative Enterprise in Guangdong, as well as Top 50 Innovative Enterprise in PV Industry awards. East successively carried out extensive in-depth technical cooperation and exchange with 20+ well-known universities and scientific research institutions at home and abroad, practicing innovative development path of 'independent innovation and integration of production, education & research'.



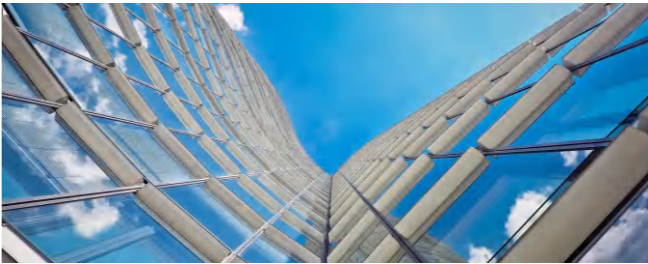

Core business

East is engaging in 3 strategic business sectors covering 5G+ smart energy(UPS/EPS power supply, 5G base station power supply, rail transit power supply, military power supply), big data(cloud computing/edge computing data center, IT infrastructure), smart energy(photovoltaic inverters, wind energy converters and power generation systems, lithium batteries and energy storage systems, charging pile modules and systems, micro-grid network and smart distribution network), and is a provider of global digital industry and smart energy integrated solution.

Project cases

EAST's products and solutions have been applied to power supply system of Shenzhou series spacecraft launch base, Qinghai-Tibet Railway, the first unmanned subway in US, Beijing S1 line, Daxing International Airport; data centers of Baidu, Tencent, Alibaba, IBM, China Mobile, China Telecom, China Unicom, China Tower, Industrial and Commercial Bank of China, Construction Bank, Agricultural Bank of China, Bank of China; EV charging pile projects for G20 summit, Hong Kong-Zhuhai-Macao Bridge, first-line brand new energy vehicles at home and abroad. In addition, East has made brilliant achievements in "rural areas, agriculture & farmers" services for many years including digital villages, photovoltaic poverty alleviation, power grid transformation, grain security project, snow bright project, rural education, rural medical.

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About Module Cube

In order to meet the needs of cloud computing and virtualization and improve the efficiency of data center infrastructure solution, EAST proposes the new generation of data center infrastructure solution — “Module Cube”. This series of solutions consist of MC2000 single-row modular data center, MC6000 single/dual-row modular data center and MC8000 container-type modular data center.

Each modular data center solution of Module Cube integrates cabinet system, power supply and power distribution system, refrigerating system, generic cabling system and intelligent management with the advantages of energy conservation and environmental protection and rapid construction. Module Cube series solution makes the occupied area reduced by more than 30%, which effectively reduces the capital expenditure and operating expense of the data center.

Module Cube modular data center construction has the characteristics of safety, reliability and saving time and money, enables to achieve optimal total cost of ownership of data center.

Highlights



Safe and reliable

- All series of modular data center solutions adopt the third generation of intelligent UPS of EAST. This series of UPS adopts DSP full digital control technology and integrates short circuit, overload, overtemperature, output overvoltage/undervoltage and pulse-by-pulse current limiting technology.
- Power distribution unit adopts dual power input for further improving the reliability of the system.



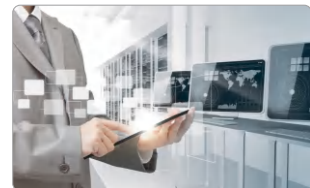
Short construction period

- MC2000 adopts single cabinet or multiple cabinet assembly mode. It can be put into use simply by assembling cabinets, connecting pipes and wiring on site.
- MC6000 adopts sub-module prefabricated production and on-site assembly, making the construction period very short.
- MC8000 adopts the overall container system factory prefabrication, boot operation only requires on site pipe connection and wiring.



Low investment

- It can be constructed in batches by modules while operating to reduce the initial amount of money invested.



Easy maintenance

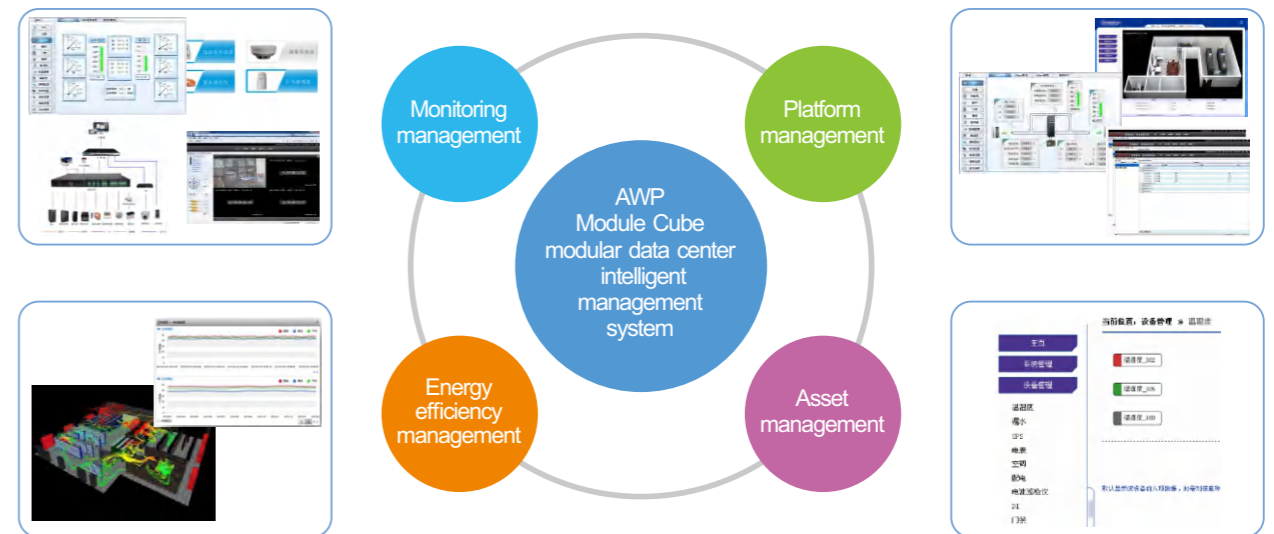
- It adopts integrated monitoring and management platform to manage multiple subsystems of air conditioner, UPS, power supply and power distribution, access control, temperature and humidity and video in the module.
- It adopts standard modular design and common parts, making maintenance easy.
- Only one manufacturer, EAST, provides all components in the module center and responsible for operating, maintenance and management.



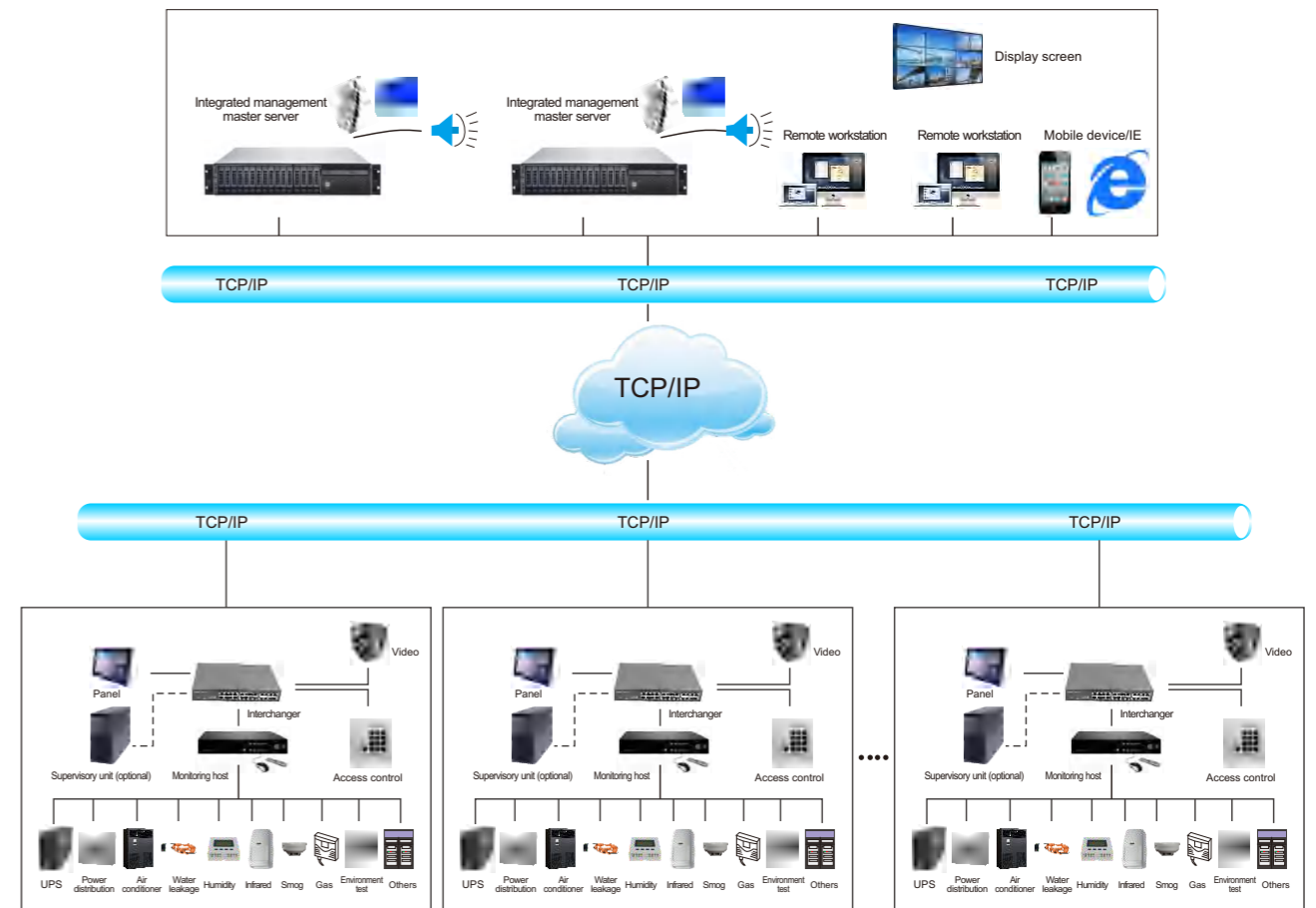
High energy efficiency

- It adopts the method of hot and cold aisle containment to avoid the mixing of hot and cold air and improve the utilization of refrigerating capacity.
- It adopts high-efficient precision air conditioner with the features of high energy efficiency ratio and sensible heat ratio.
- It adopts high frequency modular UPS/HVDC with the features of high efficiency and high power

Intelligent Monitoring and Management Functions of Modular Data Center



Network Monitoring Topology of Modular Data Center



MC2000

MC2000 series is a new generation of small and medium modular data center solution which integrates the basic data center equipment of the power supply and distribution system, UPS system, refrigeration system, emergency ventilation module, cabinet and airflow management, wiring and monitoring management system into one or multiple closed cabinets. One set of cabinet is a complete data center. Each subsystem forms its own sub-module, and each sub-module is factory prefabricated and installed in each cabinet unit. In the single cabinet mode, the system is highly integrated and no assembly is required on site; in the multi-cabinet mode, the cabinet units can be assembled on site to form a row of modular data center.

MC2000 has three types of aisle containment: hot-cold aisle containment (recommended), cold aisle containment and natural cooling. Users can select one type of them according to the actual use. It is flexible and applicable for various occasions.

MC2000 row-based modular data center is one of the ideal solutions of small and medium data center, which reduces the construction complexity of small data center and solves the problem of the specialization, standardization, construction speed and expansion of small data center construction. Moreover, it has the advantages of fast construction, high energy efficiency, various configurations and easy maintenance.



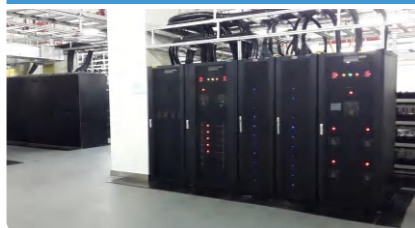
Multiple cabinet



Single cabinet

Applications

Small and medium-sized data centers



Distributed business network rooms



Small and medium-sized network equipment rooms



Information centers of township-level state organs and public institutions



Branches' device rooms of large companies



Data centers of small and medium-sized enterprises



Features

Intelligence

- MC2000 has built-in monitoring and management system and is configured with 10.1-inch industrial touch screen that can be used not only to view the parameters of the power supply and distribution, air conditioner, environmental variable and UPS but also to remotely monitor the operating parameters inside MC2000. Moreover, it can be connected to the superior monitoring platform via the internet for multi-network centralized monitoring and efficient management.
- The MC2000 cabinet is equipped with intelligent LED ambient lights. When the temperature is 18-27°C, the light will be blue (normal work). When the temperature exceeds 27°C, the color of the light will gradually change from yellow to red (warning effect). When the front door is opened, the white light is on for operation and maintenance. At the same time, the LED ambient light is linked with the infrared sensor on the top of the cabinet. When the infrared sensor detects that a person is approaching the device, the smart LED ambient light starts up normally, and automatically turns off after 5 minutes away from the device.

High energy efficiency

- MC2000 has three types of aisle containment: hot-cold aisle containment (recommended), cold aisle containment and natural cooling. Thereinto, cold aisle containment can significantly improve the utilization of cooling capacity, hot aisle containment can improve the refrigerating efficiency of air conditioner, hot-cold aisle containment can improve the utilization of cooling capacity as well as the refrigerating efficiency of air conditioner. Its PUE (Power Usage Effectiveness) is industry-leading.

Reliability

- Adopts hot-cold aisle containment, cold aisle containment and natural cooling to adapt to multiple environments.
- Overall system standard modular structure design can avoid system design problems.
- System fault-tolerant design helps high reliability.
- Strong and weak current separation design can make less electromagnetic interference.
- Pass 8,9 intensity electrified seismic performance test.

Simplification

- MC2000 overall system standard modular structure design, each sub-module is highly versatile. The sub-modules of MC2000 are prefabricated by factory and can be assembled on site, which has low requirement for installation place. The equipment can be put into use immediately after the arrival. In the process of utilization, it only needs one monitoring and management system during use with no need of facing multiple interfaces.

Flexibility

- Overall system standard modular structure design, each sub-module is highly versatile. Multiple solutions can be implemented by combining them as needed.
- The later stage can realize expansion easily.

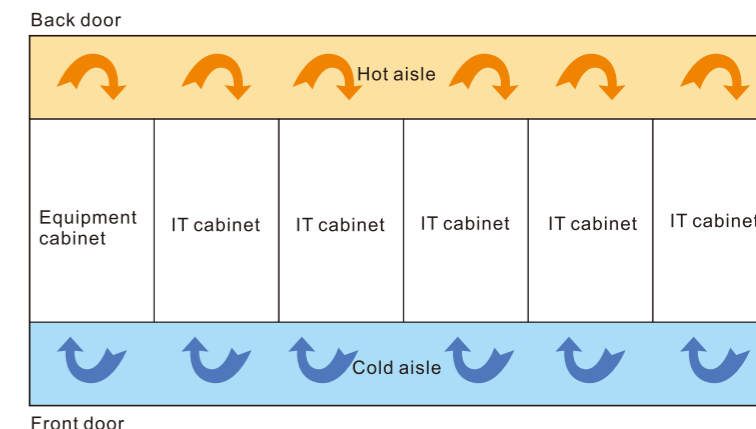
Technical Data

Overall system parameters	Numbers of cabinet for single module	1 - 12
	Max. available space	420 U (12 cabinets, without battery pack, 54 kW load)
	Aisle type	Single row aisle, natural cooling / cold aisle containment / hot-cold aisle containment
	Power density range	3 - 8 kW / cabinet
	Battery deployment	Battery pack, battery cabinet, battery rack
	Battery backup time	15 min - 240 min
	Installation	Concrete ground, raised flooring
	Power mode	Single-phase three-wire / three-phase five-wire
	System protection grade	IP 20 (mesh door) / IP 50 (glass door)
	Operating temperature	-20℃ ~ 45℃
Altitude	Derating for above 1000 m	
Cabinet system	Natural cooling	(N×600)×1200×2000 mm (excluding casters and adjusting feet, front and rear high density ventilation mesh doors; N is cabinet quantity)
	Cold aisle containment	(N×600)×1200×2000 mm (excluding casters and adjusting feet, front glass door and rear mesh door; N is cabinet quantity)
	Hot-cold aisle containment	(N×600)×1400×2000 mm (excluding casters and adjusting feet, front and rear glass doors; N is cabinet quantity)
	IP rating	IP 20 (mesh door) / IP 50 (glass door)
Refrigeration system	Input power supply	220 Vac
	Refrigerating capacity	4.5 kW (4U) / 8 kW (10U) / 15 kW (12U) / 30 kW (21U)
	Air conditioner configuration	1+0, 1+1, 2+0, 2+1, 3+0, 3+1 (optional)
	Sensible heat factor (sensible cooling capacity / total cooling capacity)	1
	Refrigerant	R410A
	Air supply method	Supply air in front and return air in the rear
	Installation	Rack-mounted
Power supply and distribution system	Power input	Single-phase three-wire / Three-phase five-wire
	UPS capacity	3 kVA / 6 kVA / 10 kVA / 20 kVA
	UPS configuration	N, N+1
	UPS rated input voltage	220/230/240 Vac single-phase, 380/400/415 Vac three-phase
	UPS input voltage range	80 ~ 280 Vac single-phase, 138 ~ 485 Vac three-phase
	UPS output power factor	0.8 / 0.9
	UPS rated output voltage	220/230/240 Vac single-phase, 380/400/415 Vac three-phase
	UPS overall efficiency	92% / 95%
	Maintenance bypass	Support
	Mains power feed-out way	4 ways IT + 4 ways air conditioner and fire-fighting systems / 12 ways IT + 5 ways air conditioner and fire-fighting systems
UPS feed-out way	4 ways IT / 12 ways IT	
AC lightning protection	Class B, C	
Monitoring system	Monitoring system host	Support direct access for embedded Web
	Local interface	10.1-inch industrial touch screen
	Water leak detection rope	Standard configuration
	Smoke detection	Standard configuration
	Temperature and humidity	Standard configuration
	Automatic spring door device	Optional configuration
	Door sensor	Optional configuration
	Power supply and distribution / UPS / air conditioner monitoring	Standard configuration
	Northbound communication interface	Optional configuration
	Protocol format	SNMP
	SMS alarm	Optional configuration
	Rechargeable fan	Optional configuration

	Rope light in cabinet	Standard configuration
Firefighting system	Heptafluoropropane gas fire protection module	1U rack installation, a single module can manage two cabinets (optional)

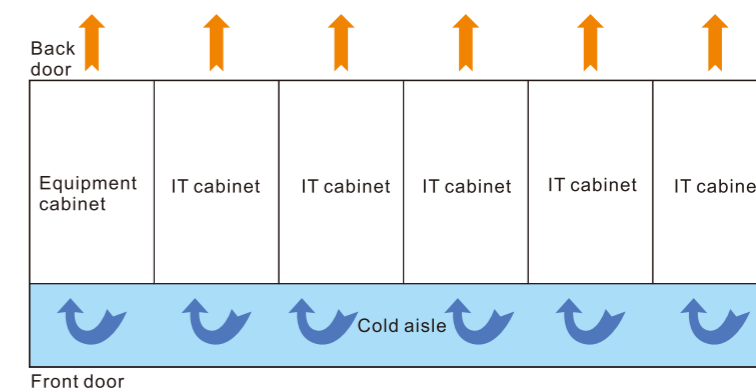
MC2000 Hot-cold Aisle Containment Solution

MC2000 hot-cold aisle containment solution is the solution that closes both cold aisle and hot aisle. It has the both advantages of high utilization of cooling capacity when closing cold aisle and improving refrigerating efficiency of air conditioner when closing hot aisle. This solution has the better energy saving effect. MC2000 hot-cold aisle containment solution uses variable capacity computer room air conditioner with load following technology, which can be used to adjust the output of cooling capacity and air capacity according to actual load calorific value for further improving energy saving effect. The independent micro modules of MC2000 hot-cold aisle containment solution has not much requirement for ambient environment and has stronger adaptability. This solution is applicable for most applied occasions.



MC2000 Cold Aisle Containment Solution

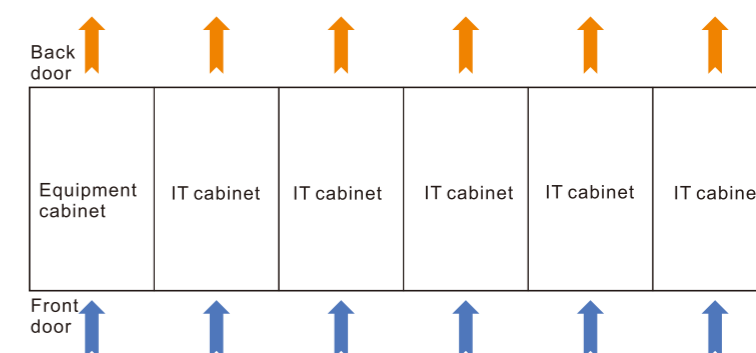
MC2000 cold aisle containment solution manages the output cooling capacity of computer room air conditioner, it only cools the device with no need of cooling the ambient environment to improve the utilization of cooling capacity. This cold aisle containment solution is better used in the computer rooms which have more cables at the back side of the cabinet or have relatively large area.



MC2000 Natural Cooling Solution

With natural cooling solution, there is no need to configure an air conditioning system.

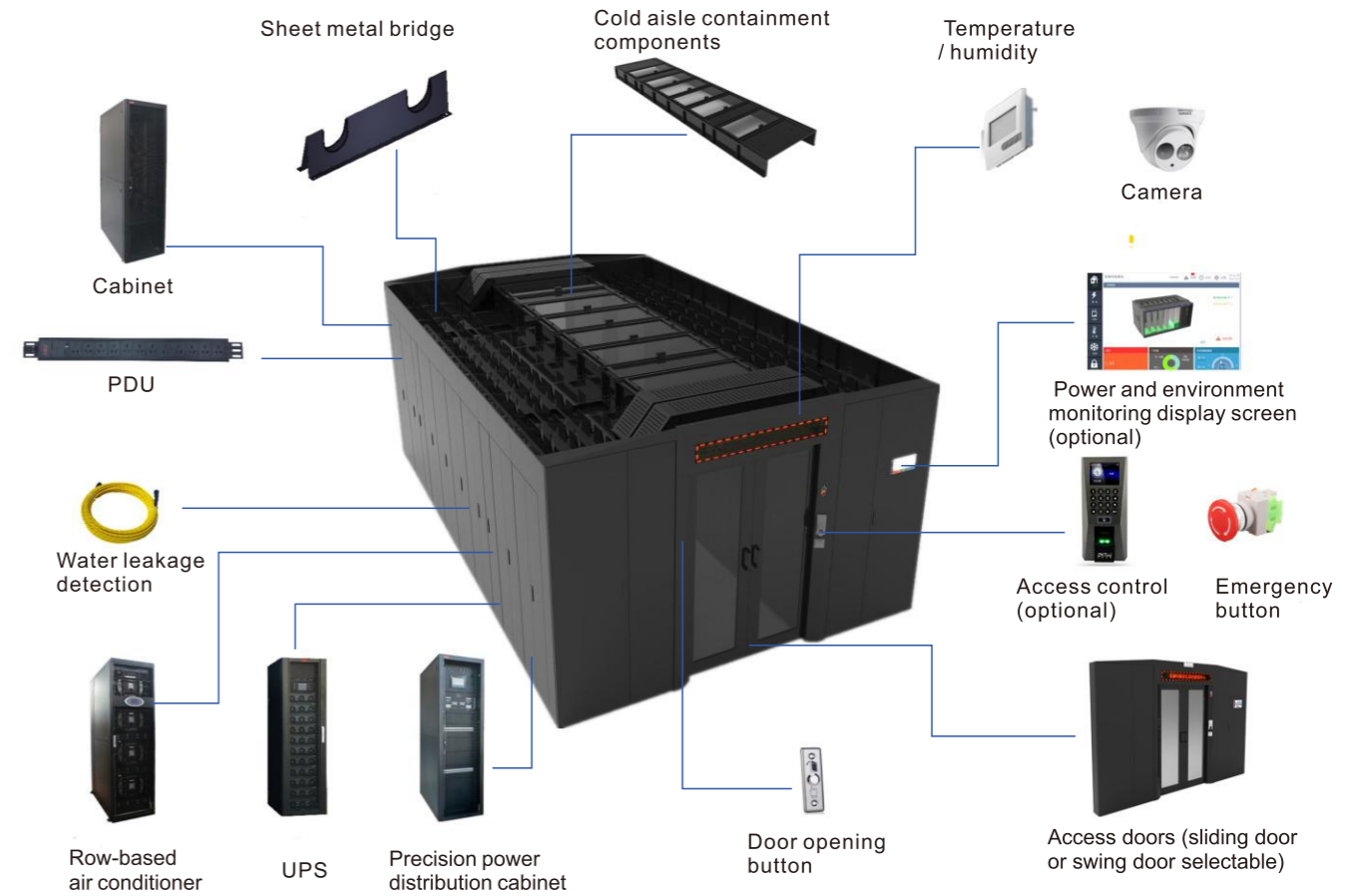
The front and rear doors of the cabinet are equipped with mesh doors, which make use of the cooling system of IT equipment to cool down naturally. In this solution, civil air conditioners or temperature control systems in other rooms are generally used in the machine room to keep the indoor temperature from overheating.



MC6000

MC6000 series micro modular data center is the latest generation of data center infrastructure solution, which integrates all the subsystems like cabinets in the traditional data center, refrigeration, power supply and distribution system, airflow management, firefighting, wiring, security, monitoring and lighting into one. It adopts efficient and reliable modular precision power supply and distribution equipment and system standardization architecture design, which makes components and parts high versatile and factory prefabricated, makes construction period of data centers shorter and later maintenance more convenient and quicker. It is featured with high reliability and high security and enables rapid and flexible deployment and relocation for the whole system.

MC6000 has three types of aisle containment for choice: cold aisle containment, hot aisle containment and hot-cold aisle containment. The access door has a variety of options such as revolving sliding door, automatic or manual translation door, etc., to meet the different needs of customers.



Applications

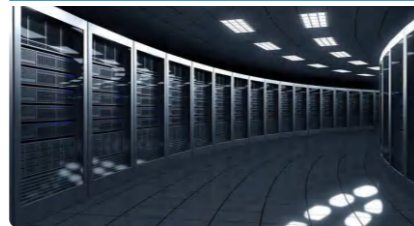
Medium and large data centers



Information centers of state organs and public institutions



Telecom data centers, information rooms



Data centers of higher education institutions



Data centers of financial institutions



Large educational institutions



Features

Reliability

- System standardization architecture design makes components and parts high versatile and avoids system design problems
- System fault-tolerant design helps high reliability
- Strong and weak current separation design makes less electromagnetic interference
- Very early fire warning
- Pass 8,9 intensity electrified seismic performance test

High efficiency

- Efficient integrated power supply and distribution, enclosed hot and cold aisles, high power density and energy efficiency
- Support single-row or double-row hot-cold aisle containment in a variety of ways, isolate hot and cold air flow and eliminate local hot spots

Energy conservation

- PUE can be maintained at a lower level through enclosed aisle design, and is more energy efficient than traditional computer room
- Later expansion available, saving investment costs

Simplification

- Standard modular structure design helps to realize modular combination in different sizes and different powers. Product delivery can be completed in 3-6 weeks

Intelligence

- Micro-module monitoring system performs all-round monitoring and unified management on the power distribution, environment, security, fire protection and other equipment inside the micro-module
- Energy consumption of the micro-module can be analyzed precisely through the precise distribution system

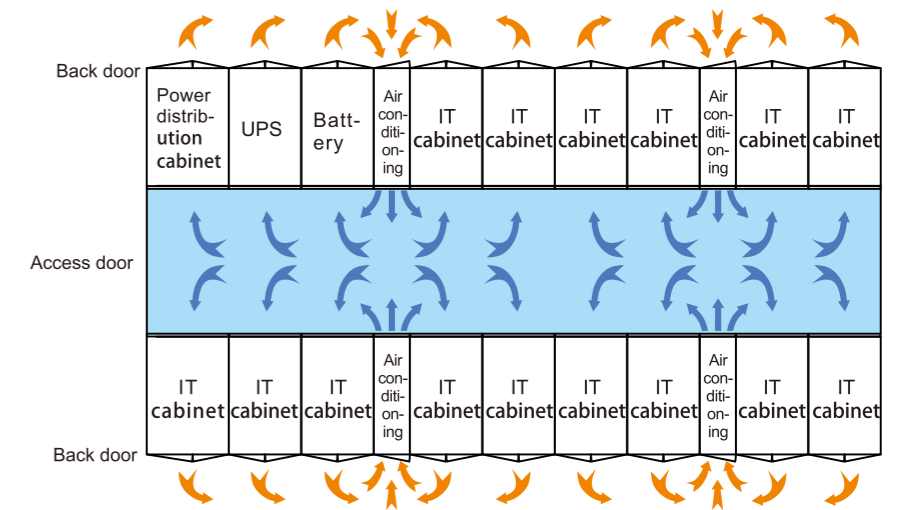
Technical Data

Micro modular system	Dimensions	Single row cold / hot aisle containment (L×W×H)
		L×2465×2550 / 2750 mm, L ≤ 15 m
		L×2365×2550 / 2750 mm, L ≤ 15 m
		L×2265×2550 / 2750 mm, L ≤ 15 m
		Double row cold / hot aisle containment (L×W×H)
		L×3600×2550 / 2750 mm, L ≤ 15 m
	L×3400×2550 / 2750 mm, L ≤ 15 m	
	L×3200×2550 / 2750 mm, L ≤ 15 m	
	Access doors	Revolving sliding door (concealed door closer, concealed electromagnetic locks design; two installations - access inside / outside are selectable for the power and environment monitoring display screen)
		Translation door (auto / manual are selectable)
Cabinet quantities of Single module	Single row: 3 - 24 Double row: 6 - 48	
Power mode	AC: 380 / 400 / 415 Vac, 50 / 60 Hz, 3Ph + N + PE	
	DC: - 48 / 240 / 336 Vdc	
Single module IT power consumption	Max. 200 kW (Confirm with an engineer for above 200kW)	
Max. power of single cabinet	18 kW	
Operating environment	Ultra-low temperature condition: -40 ~ 45°C	
	T1 condition: -25 ~ 45°C	
	T3 condition: -5 ~ 45°C	
Reliability level	Tier II or Tier III (extendable to Tier IV)	
Altitude	0 - 1000 m (downgrading for above 1000 m)	
Cabinet	Dimensions (W×D×H)	600 / 800x1200x2000 / 2200 mm
		600 / 800x1100x2000 / 2200 mm
		600 / 800x1000x2000 / 2200 mm
	Available space	42U / 47U
IP rating	IP20	
Air cooled in-row air conditioner	Refrigerating capacity	12 kW / 25 kW / 40 kW
	Dimensions of internal machine	300 / 600x1000 / 1100 / 1200x2000 / 2200 mm
	Input power supply	AC: 380 / 400 / 415 Vac, 50 / 60 Hz (optional DC: 240 / 336 Vdc)
	Refrigerant	R410A
	Fluorine pump	Optional
Chilled water in-row air conditioner	Refrigerating capacity	12 kW □ 70 kW
	Dimensions of internal machine	300 / 600x1000 / 1100 / 1200x2000 / 2200 mm
	Input power supply	AC: 380 / 400 / 415 Vac, 50 / 60 Hz (optional DC: 240 / 336 Vdc)
Integrated UPS (built-in UPS)	Refrigerant	Water / ethylene glycol aqueous solution
	Input voltage	380 / 400 / 415 Vac, 50 / 60 Hz, 3Ph + N + PE
	Input power factor	> 0.99 (full load), > 0.98 (half load)
	Rated capacity	50 ~ 200 kVA
	Efficiency	≥ 96%
Modular power distribution cabinet (external UPS)	AC lightning protection	Class B, C
	Input voltage	380 / 400 / 415 Vac, 50 / 60 Hz, 3Ph + N + PE
	Rated capacity	500 A
	AC lightning protection	Class B, C

Note: 1. Different batteries can be configured by customers for getting different backup time.
2. If choose air-cooled air conditioner, optional cryogenic components are needed when outside temperature is below -15°C
3. Cabinet fire protection without piping system is selectable for hot-cold aisle containment solution.

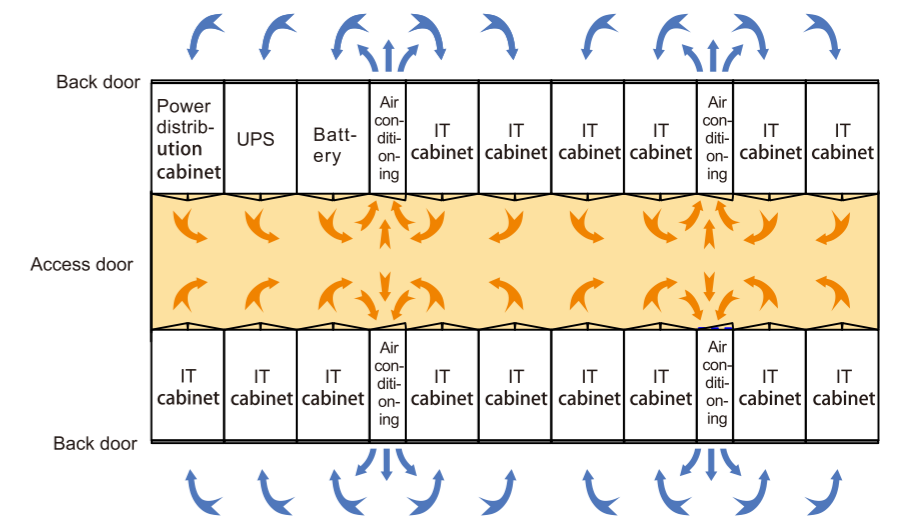
MC6000 Cold Aisle Containment Solution

MC6000 cold aisle containment solution makes the cabinet placed face to face, closes the cold aisle on the front of cabinets to make utilization of their cooling capacity higher. The external of MC6000 module is a thermal environment, there is no need to refrigerate the external environment to avoid cold waste. It is especially suitable for data centers built in batches.



MC6000 Hot Aisle Containment Solution

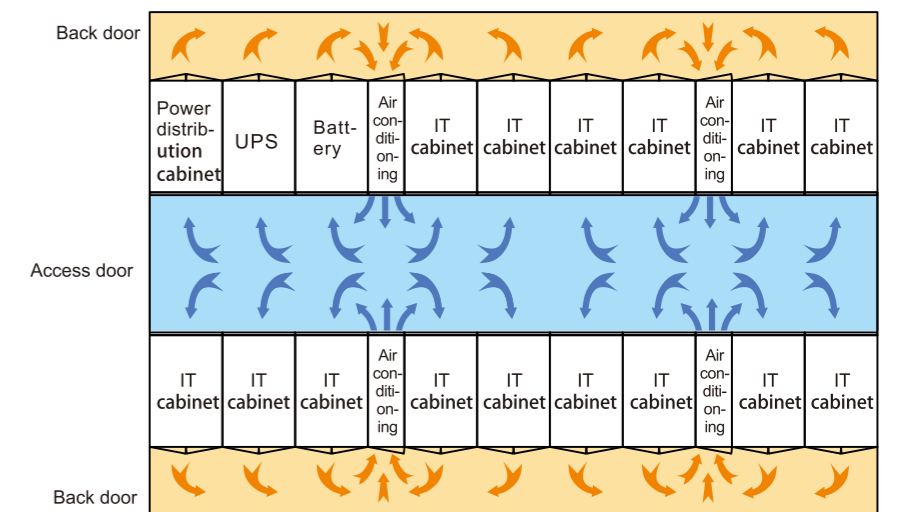
MC6000 hot aisle containment solution makes the cabinet placed back to back, closes the hot aisle on the back of cabinets to raise the return air temperature of the air conditioning in the machine room, so as to improve the cooling efficiency of the air conditioning. Meanwhile, the machine room is in cold environment, maintenance personnel feel more comfortable. It is suitable for machine room with low loads or high maintenance frequency.



MC6000 Hot-cold Aisle Containment Solution

MC6000 hot-cold aisle containment solution is the solution that closes both cold aisle and hot aisle. It has the both advantages of high utilization of cooling capacity when closing cold aisle and improving refrigerating efficiency of air conditioner when closing hot aisle. This solution has the better energy saving effect.

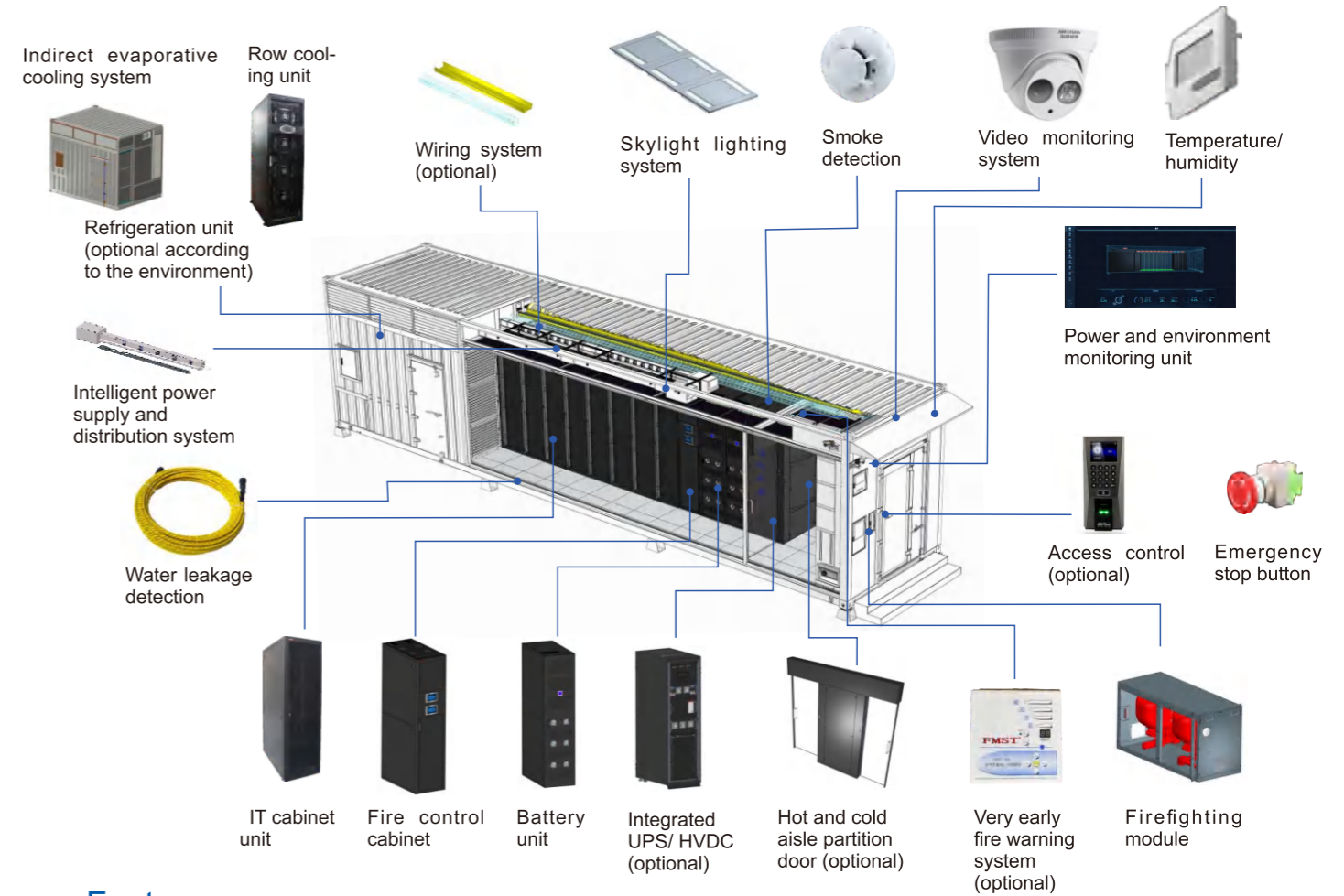
MC6000 hot-cold aisle containment solution has not much requirement for ambient environment and has stronger adaptability. This solution is applicable for most applied occasions.



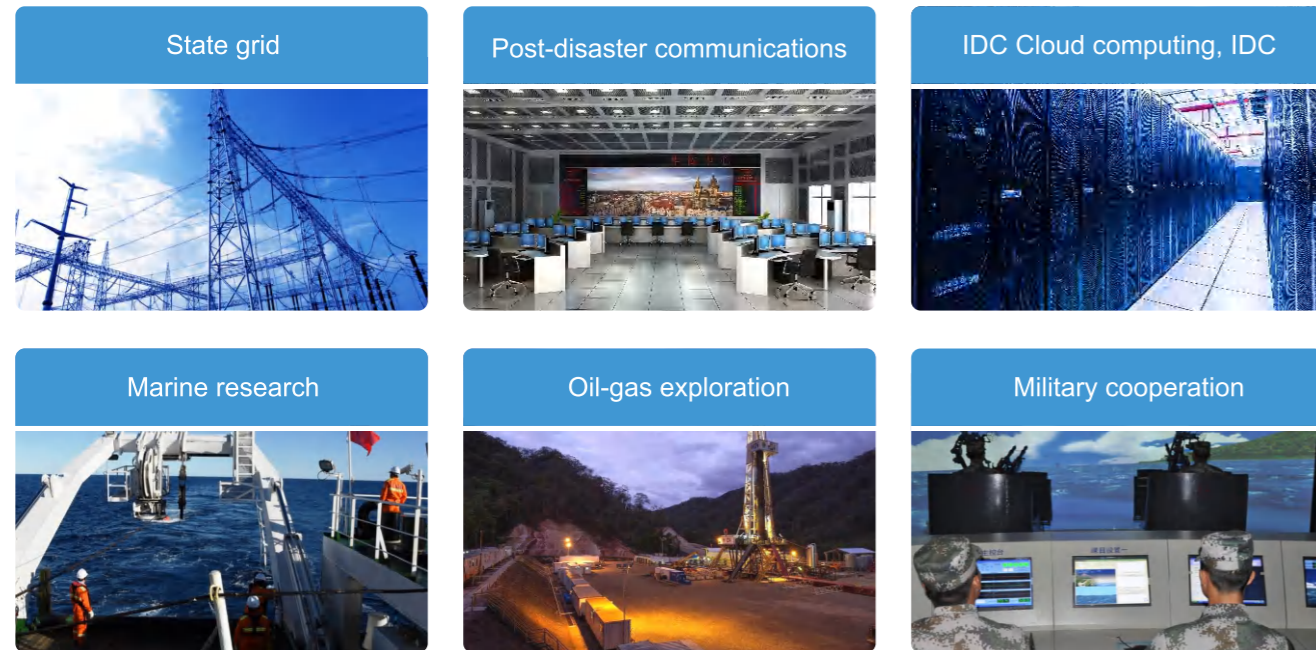
MC8000

The MC8000 series is a new generation of prefabricated modular data center infrastructure solution, which integrates all the subsystems like cabinets, refrigeration, power supply and distribution system, airflow management, firefighting, wiring, security, monitoring and lighting of the traditional data center into one container. Different from the traditional way of starting with architecture and then designing and constructing, it is container data center module prefabricated in the factory. All equipment and systems are pre-assembled in the factory. After positioning and the foundation laying, the container data center is transported to the site as a whole to be installed in place, and then it can be put into use after connecting the water, electricity and network.

The MC8000 container data center system prefabricated in the factory is featured with sufficient quality assurance, high reliability, low operating cost, high efficiency, low carbon, green energy saving, rapid deployment, capacity expansion on demand.



Applications



Features

Intelligence

- MC8000 has built-in monitoring and management system and is configured with 21-inch industrial large touch screen that can be used to view the parameters of the power supply and distribution, air conditioner, environment and UPS. With its own unattended automatic operation platform, remote monitoring of the operating parameters inside MC8000 can be performed without leaving home. Moreover, it can be connected to the upper level monitoring platform via the internet for multi-network centralized monitoring and intelligent management.

Flexibility

- The overall system is factory prefabricated.
- The container data center can be put into use after it is transported to the site and connected with the water, electricity and network.
- Container-type overall design, easy to move, can be deployed quickly and flexibly according to data center's needs.
- The container modules can be expanded one by one and constructed in phases.

Reliability

- 25-year cabinet design life, IP55 protection grade
- Standardized design of the overall container system to avoid system design problems
- The overall system is factory prefabricated, and all the assembly and commissioning pass the quality test of the factory, which greatly reduces the workload and the uncontrollable factors of on-site construction
- Strong and weak current separation design makes less electromagnetic interference
- Very early fire warning system (optional)

High efficiency

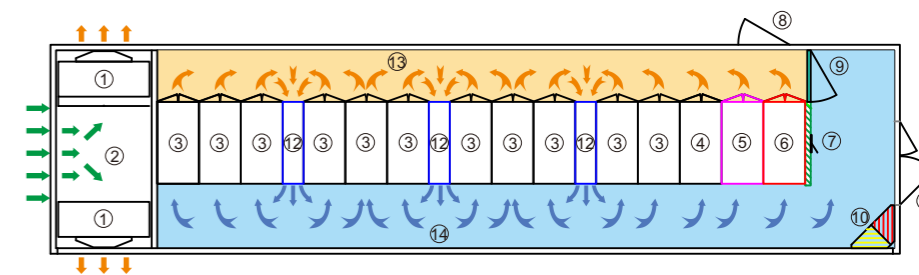
- Efficient integrated power supply and distribution, enclosed hot and cold aisles, high power density and energy efficiency
- Support single container or multi-container assembly mode, and increase land utilization rate through stacking.
- The cold and hot aisles inside the overall container are isolated from the outside to improve the utilization efficiency of refrigeration.

Technical Data

Subsystem		Specification
Container system	Dimensions	40 (12192 x 2438 / 3000 x 2896 / 3000 / 3200 mm) (L×W×H) Multiple container assembly solution needs to be customized
		20 (6058 X 2438 / 3000 X 2896 / 3000 / 3200 mm)(L×W×H)
Power supply and distribution (Integrated UPS /HVDC)	Input voltage	380 /400 / 415 Vac, 50 / 60 Hz, 3 Ph + N + PE
	Input power factor	Full load>0.99, half load>0.98
	Rated capacity	50 - 200 kVA
	Efficiency	≥ 96%
	AC lightning protection	Class B, C
Battery	Built-in battery cabinet	5-20 minutes backup time
Air cooled in-row air conditioner	Refrigerating capacity	12 kW / 25 kW / 40kW
	Dimensions	300 /600 x 1000 / 1100 / 1200 x 2000 / 2200 mm (W×D×H)
	Input power supply	380 / 400 / 415 Vac, 50 / 60 Hz, 3 Ph + N + PE
	Refrigerant	R410A
	Fluorine pump	Optional
Chilled water in-row air conditioner	Refrigerating capacity	12 kW / 25 kW / 40kW
	Dimensions	300 /600 x 1000 / 1100 / 1200 x 2000 / 2200 mm (W×D×H)
	Input power supply	380 / 400 / 415 Vac, 50 / 60 Hz, 3 Ph + N + PE
Indirect evaporative refrigeration unit	Refrigerating capacity	65 kW/ 120 kW
	Dimensions	2400 X 3000 X 3200 mm / 4100 X 3000 X 3200 mm (L×W×H)
	Input power supply	380 / 400 / 415 Vac, 50 / 60 Hz, 3 Ph + N + PE
Cabinet system	Refrigerant	R410A
	Dimensions	600 x 1000 / 1100 / 1200 x 2000 / 2200 mm (W×D×H)
	20-inch Number of supported IT cabinets	5 - 6
Firefighting system	40-inch Number of supported IT cabinets	9 - 13
	Firefighting system	Automatic fire detection and fire extinguishing system
Security system	Firefighting module	Rack-mounted fire module (13U), can be installed into a standard 19-inch rack
	Firefighting gas	Heptafluoropropane
	Very early smoke detection system	Optional
Work environment	Access control	Standard access control system, optional fingerprint, password, swipe card and other multi-functional access control management methods
	Escape system	The container is equipped with fire escape door for quick escape from the inside
	Video monitoring	IP high-definition camera, connected to the power and environment system
Work environment	IP rating	IP 55
	Temperature	-40 °C ~ +52 °C
	Humidity	10% ~ 100%
	Altitude	Downgrading for above 1000 m

MC8000 Air-cooled Temperature Control

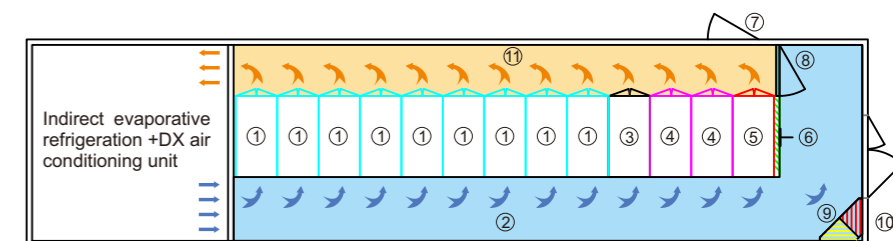
The row air-cooled temperature control solution is recommended. When this solution is adopted, the air conditioner external unit or the centralized condenser is installed in the compartment, and all the subsystems are assembled in the factory to realize the prefabrication of the whole system, which is simple and convenient, and has a wide range of use; Fluorine pump can be selected according to needs, which is more energy-saving.



- ① Condenser ② Air conditioner external unit ③ IT cabinet ④ Fire control cabinet
- ⑤ Battery cabinet ⑥ Array integrated cabinet ⑦ Power and environment monitoring screen
- ⑧ Escape door ⑨ Partition door ⑩ Incoming cabinet ⑪ Main entrance door
- ⑫ Column-based air conditioner ⑬ Hot aisle ⑭ Cold aisle

MC8000 Indirect Evaporative Temperature

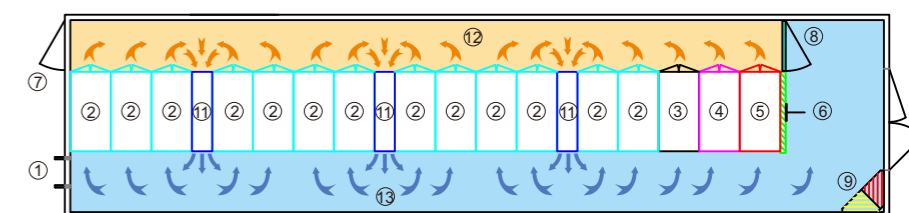
For areas with high air cleanliness and dust-free weather, indirect evaporative cooling temperature control solution is recommended. The solution is divided into three working conditions, indirect evaporative cooling (with spray) + DX refrigeration, indirect evaporative cooling (with spray, wet conditions), indirect cooling (no spray, dry conditions). The system can automatically change the working mode according to the change of external temperature and humidity environment, so as to save energy.



- ① IT cabinet ② Cold aisle ③ Fire control cabinet ④ Battery cabinet
- ⑤ Array integrated cabinet ⑥ Power and environment monitoring screen
- ⑦ Escape door ⑧ Partition door ⑨ Incoming cabinet ⑩ Main entrance door
- ⑪ Hot aisle

MC8000 Chilled Water Temperature Control Solution

For data center parks that have redundant chilled water resources available, chilled water temperature control solution is recommended. The original cooling tower and chiller are used to improve the utilization rate of resources. The chilled water solution can improve the maximum power density of a single cabinet, improve the utilization rate of containers and save resources.



- ① Inlet and outlet pipes connected with chilled water ② IT cabinet ③ Fire control cabinet
- ④ Battery cabinet ⑤ Array integrated cabinet ⑥ Power and environment monitoring screen
- ⑦ Escape door ⑧ Partition door ⑨ Incoming cabinet ⑩ Main entrance door
- ⑪ Column-based air conditioner ⑫ Hot aisle ⑬ Cold aisle