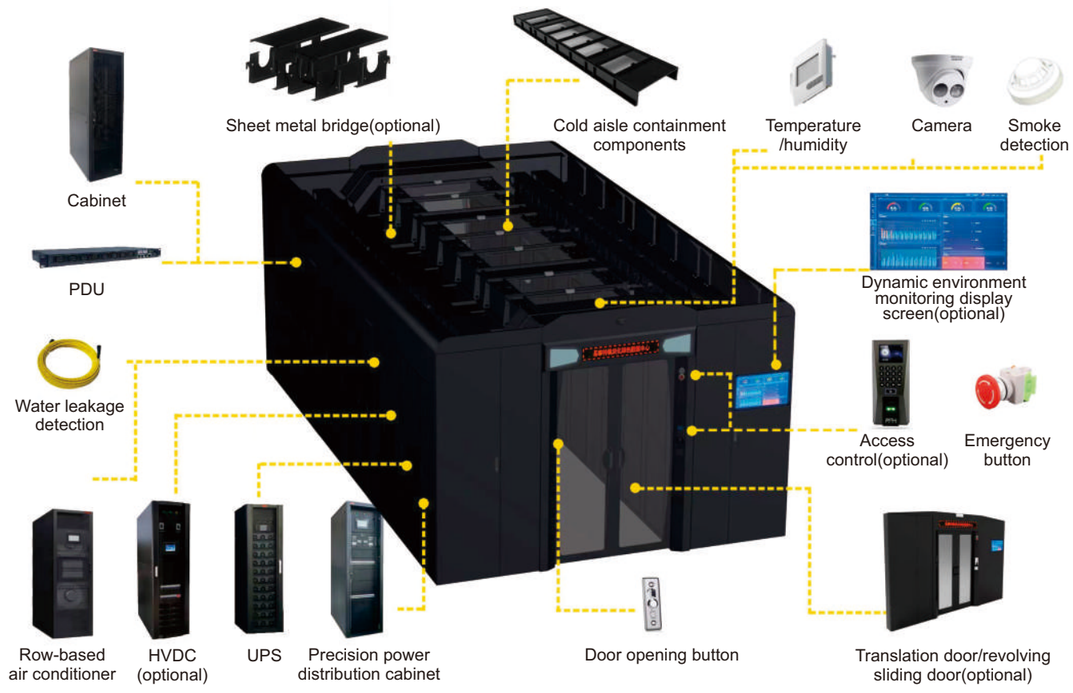
MC6000

MC6000 series micro modular data center is the latest generation of data center infrastructure solution, which integrates all the subsystems like cabinets, refrigeration, power supply and distribution system, airflow management, firefighting, cabling, 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.

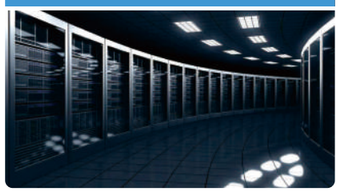


Applications

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(option).
- 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, the capacity can be gradually upgraded and expanded according to the later development situation, saving the initial investment cost.

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.

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.

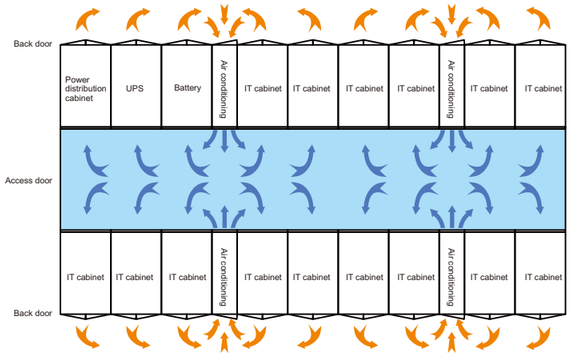
Technical Data

Micro modular system	Dimensions	Single row cold/hot aisle containment(L×W×H)
		L×2465×2550/2750mm, L≤15m, height 2550/2750mm is the total height of the system after the skylight is flipped
		L×2365×2550/2750mm, L≤15m, height 2550/2750mm is the total height of the system after the skylight is flipped
		L×2265×2550/2750mm, L≤15m, height 2550/2750mm is the total height of the system after the skylight is flipped
		Double row cold/hot aisle containment(L×W×H)
		L×3600×2550/2750mm, L≤15m, height 2550/2750mm is the total height of the system after the skylight is flipped
		L×3400×2550/2750mm, L≤15m, height 2550/2750mm is the total height of the system after the skylight is flipped
		L×3200×2550/2750mm, L≤15m, height 2550/2750mm is the total height of the system after the skylight is flipped
	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, with 200mm deep cabinets on both sides, can hide the translation door, and can install dynamic environment equipment)
	Cabinet quantity of Single module	Single row: 3~24; Double row: 6~48
	Power mode	AC: 380/400/415Vac, 50/60 Hz, 3Ph+N+PE
		DC: -48/240/336Vdc, positive and negative+PE
	Single module IT power consumption	Max. 200kW(Confirm with an engineer for above 200kW)
	Max. power of single cabinet	18kW
	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	0~1000m(derating for above 1000m)
Cabinet	Dimensions(W×D×H)	600/800×1200×2000/2200mm
		600/800×1100×2000/2200mm
		600/800×1000×2000/2200mm
	Available space	42U/47U
	IP rating	IP20
Air cooled in-row air conditioner	Refrigerating capacity(single air conditioner)	12kW/25kW/40kW
	Dimensions of internal machine	300/600×1000/1100/1200×2000/2200mm
	Input power supply	AC: 380/400/415Vac, 50/60Hz(optional DC: 240/336Vdc)
	Refrigerant	R410A
	Fluorine pump	Optional
Chilled water in-row air conditioner	Refrigerating capacity	12kW~70kW
	Dimensions of internal machine	300/600×1000/1100/1200×2000/2200mm
	Input power supply	AC: 380/400/415Vac, 50/60Hz(optional DC: 240/336Vdc)
	Refrigerant	Water/ethylene glycol aqueous solution
Integrated UPS (built-in UPS)	Input voltage	380/400/415Vac, 50/60Hz, 3Ph+N+PE
	Input power factor	>0.99(full load), >0.98(half load)
	Rated capacity	50~200kVA
	Efficiency	≥96%
	AC lightning protection	Class B, C
Modular power distribution cabinet (external UPS)	Input voltage	380/400/415Vac, 50/60Hz, 3Ph+N+PE
	Rated capacity	500A
	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.

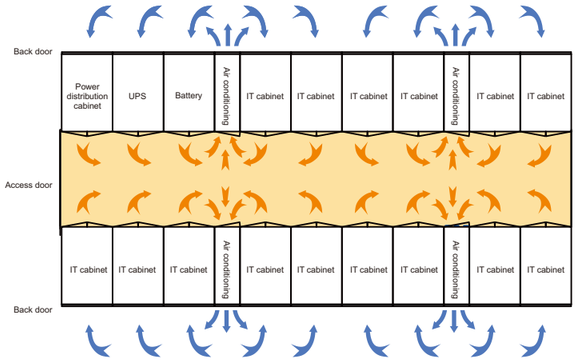
MC6000 Cold Aisle Containment Solution

MC6000 cold aisle containment solution places the cabinet face to face, closes the cold aisle on the front of the cabinets to make utilization of the refrigerating 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 places the cabinet 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 refrigerating 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.