

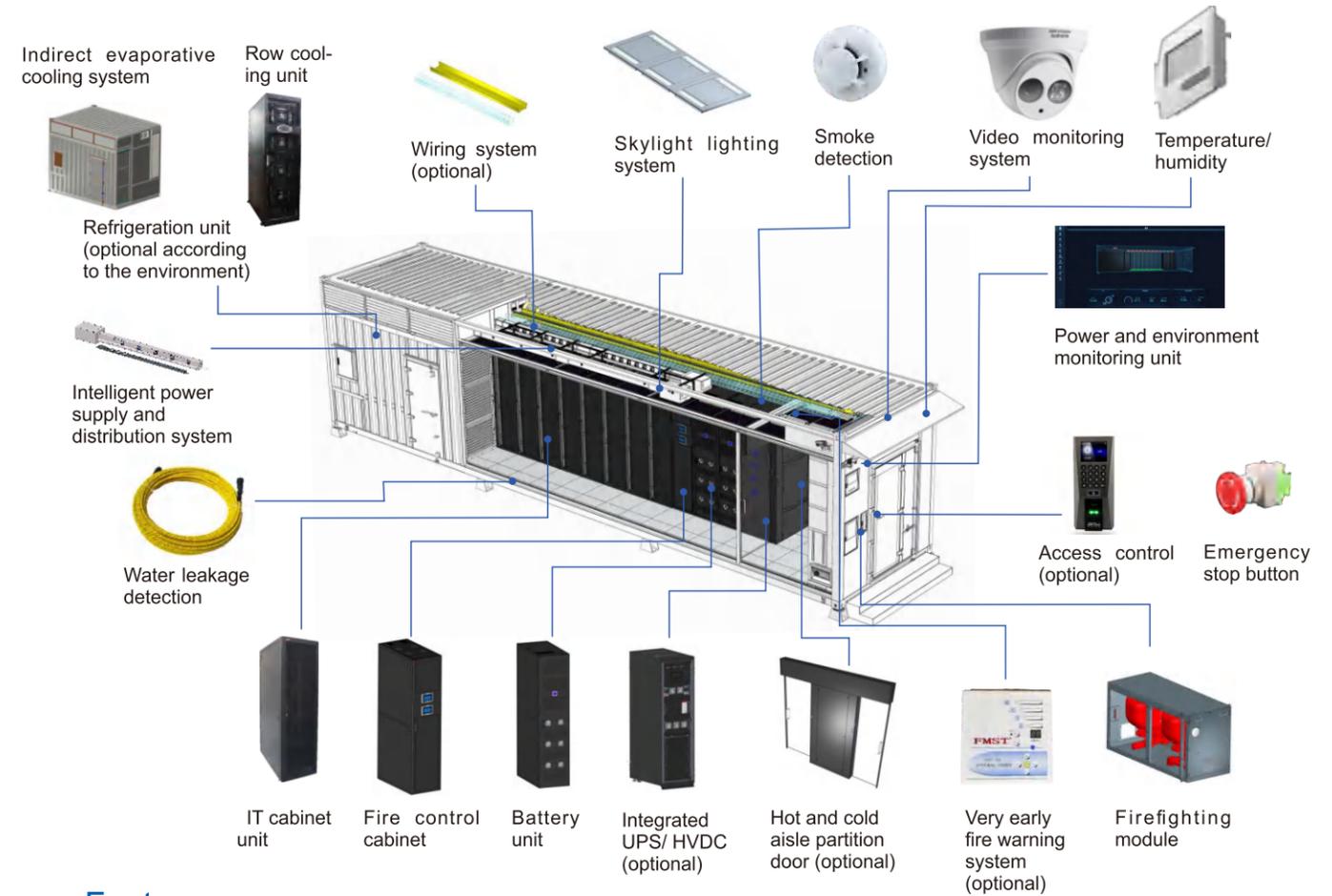
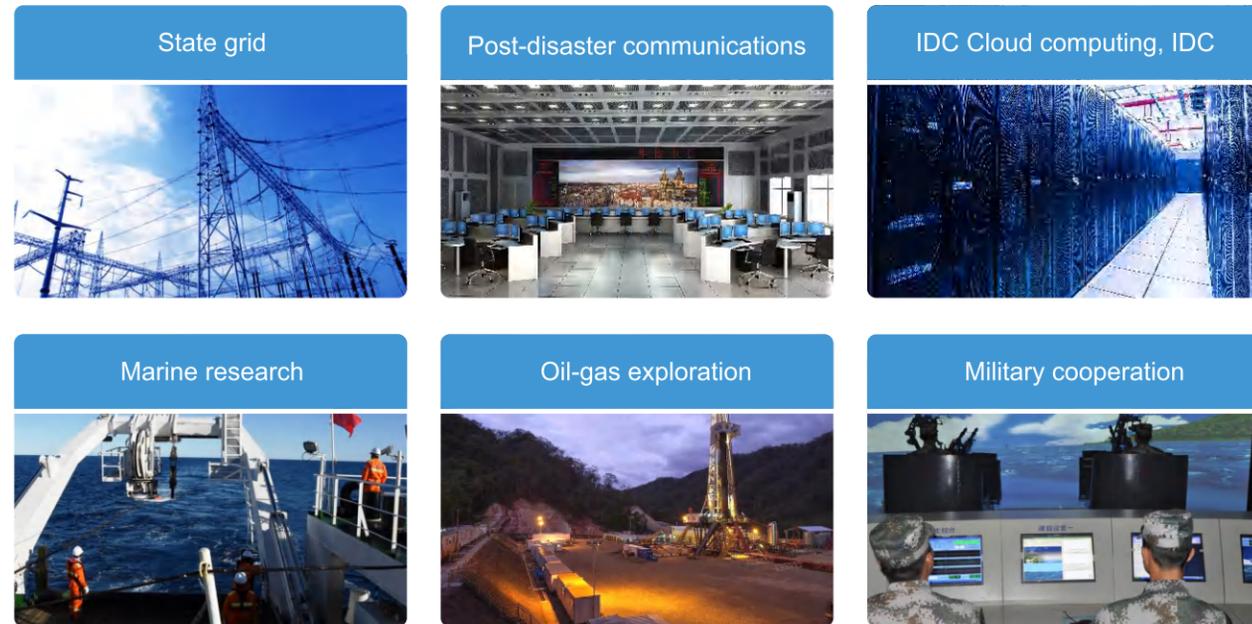
MC8000

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

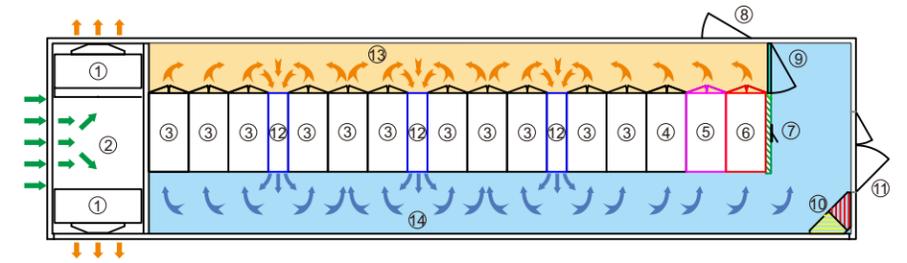
- Efficient integrated power supply and distribution, enclosed hot and cold aisles, high power density and energy efficiency
- Support single container or multi-container assembly mode, and increase land utilization rate through stacking.
- The cold and hot aisles inside the overall container are isolated 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
	Refrigerant	R410A
Cabinet system	20-inch Number of supported IT cabinets	5 - 6
	40-inch Number of supported IT cabinets	9 - 13
Firefighting system	Firefighting system	Automatic fire detection and fire extinguishing 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
Security system	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

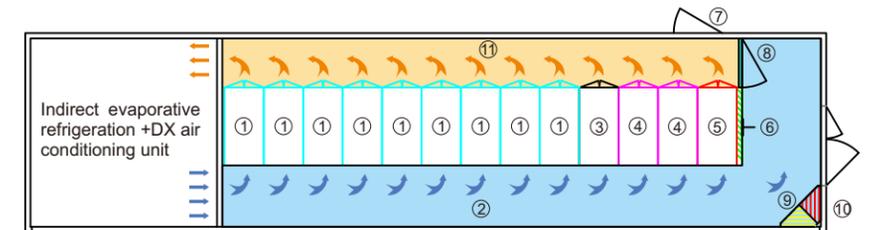
The row air-cooled temperature control solution is recommended. When this solution is adopted, the air conditioner external unit or the centralized condenser is installed in the compartment, and all the subsystems are assembled in the factory to realize the prefabrication of the whole system, which is 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

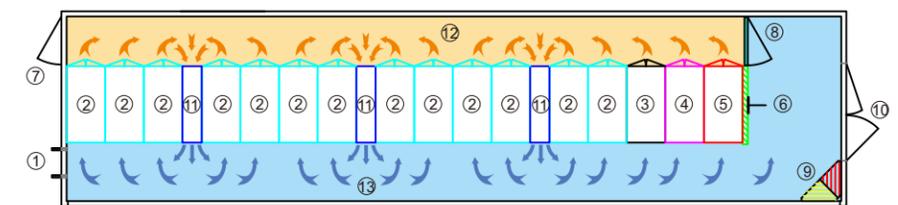
For areas with high air cleanliness and dust-free weather, indirect evaporative cooling temperature control solution is recommended. The solution is divided into three working conditions, indirect evaporative cooling (with spray) + DX refrigeration, indirect evaporative cooling (with spray, wet conditions), 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