Precision Series Single Row Cabinet Data Centre

Precision Product Introduction

The Precision series single row cabinet data center integrates all needed equipment into cabinet with closed hot and cold aisle, kinds of sensors monitored and managed by power and environment system, which standardize the whole data center to smaller space, comes with remote intelligent controlling, provides safe and reliable operation environment. No need for professional engineer maintenance which simplify construction, operating and maintenance.



Product Features

Safe and reliable

- All components follow domestic and international standardized production standard to ensure product quality.
- Pre-installation, pre-commissioning and other process are controlled at various levels to ensure product installation and operation safe and reliable.
- Integrated design, improving overall system reliability.
- Intelligent pop-up door system ensure the continuous operation of the system effectively.
- Redundant design, integrated intelligent monitoring system, ensure the safe and reliable operation of the computer room.

High efficiency and energy saving

- Array/rack mount refrigeration, precise cooling, greatly improve cooling efficiency, compared with traditional computer room energy saving 25%.
- The system adapts N+X online high-efficiency modular UPS, equipped with intelligent sleep function making system save more energy.
- Remote operation and maintenance, human-free design, saving TCO.
- Closed hot and cold aisles, and effective cooling, realize air inner circulation to reduce operating costs.

Rapid installation

- Engineering free design, suitable for various scenes, install rapidly.
- Modular design of power distribution, hot-swappable ,easy installation and maintenance.
- The system does not need special decoration treatment, the equipment is ready to use. Installation and commissioning cycle only need 4-6 hours.
- A single cabinet is a complete system, which can be easily and quickly expanded to 16 cabinets side by side.

Intelligent management

- Intelligently monitor power supply and environment status.
- Instant and real-time alarm through various ways(SMS, sound and light, e-mail,phone).
- The monitoring system is compatible with many parts(screen, remote APP, local LCD, remote WEB); friendly HMI.
- Provide kinds of interface(ModbusTCP, MQTT, SNMP), easy to system integration.

Applicable Scene

Computer rooms of medium and small enterprises, government branch offices, commercial, medical, education, power, communication and other scenes.


Communication


Commercial


Government


Medical


Education


Power source

Floor area

The overall area of a single cabinet is 0.9㎡, which is suitable for computer rooms within 20-60㎡.

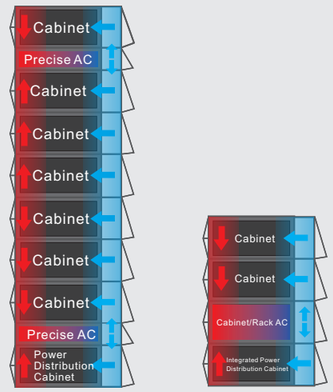
System Capacity

Capacity of single cabinet≈3~7kVA

Structure and Composition

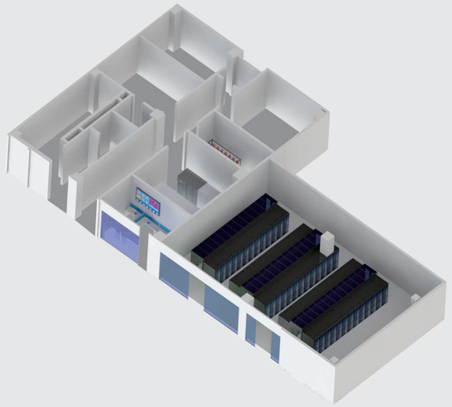


Airflow Reference Chart



Note: The layout can be adjusted according to the equipment condition

Application Scenario



The difference with traditional solution

	Precision series single row data center	Traditional data center
Design	Pre-commissioning in dustry, put into use directly	Different supplier coordinate
Power Distribution	Rack mount, modular, including thunder protection	Isolated design, installation without thunder protection
Installation	Distributed wiring, integrated in dustry, modular	Long construction period, design on site, lack of reliability
Scalability	All components are modular, module number can be adjusted	Lack of expandability
Construction Time	4-6 hours	40 days(including decoration)
Appearance	Unified and harmonious appearance	Hard to unified size/color
Dustproof	Totally enclosed system, IP5X,targeted protection of core equipment	Not avaliable(high cost of dustproof)
Cooling efficiency	Enclosed hot and cold air channel, cooling by the nearest AC, improve cooling efficiency	No isolation of hot and cold air channel, low utilization
Noise	<45dB(A)	>65dB, not suitable for human long-term work
Monitoring System	Local and remote monitoring, human-free	Isolated monitoring equipment, different interface,incompetible
Client interface	Embeded Linux system, long-term operation safe and steady, graphical interface, easy management	Industrial PC, easy to crashing, monitor interface incompetible
Emergency solution	Emergency pop-up door, make good use of room to dissipate heat, maximize the time of emergency operation	Not avaliable
Service	Unified brand and service, full service during the life of product	Different guarantee period service interface and phone number

Parameters

Precision series single row data center (closed hot and cold aisles)			
Overall plan	IT cabinet number		2-15 cabinets
	Mains		220Vac, 50/60Hz, 1Ph+N+PE; 380Vac, 50/60Hz, 3Ph+N+PE
	Ambient Temperature		0-45℃
	IP Class		IP5X
	Altitude		1000m, derated for>1000m
Cabinet	Dimension(W*D*H)		600*1400*2000mm(Without caster)
	Display		10.1 inch touch screen LCD
	Lighting		Front and rear LED, front Tri-color LED
	Cable entry		Top and bottom
	Door Security		Fingerprint+IC/ID card+Password
	Emergency Method		Pop-up door system
Power supply and distribution system	Distribution system	Total input current	63-200A
		Thunder protection	C Level
		Capacity	10kVA-90kVA
	UPS	Input Voltage	220Vac, 50/60Hz, 1Ph+N+PE; 380Vac, 50/60Hz, 3Ph+N+PE
		Operation Mode	1(phase in)/1(phase out), 3/1, 3/3
		Battery	Battery pack/cabinet
	PDU	Normal	2pcs, 16ports(13*C10A + 3*C16)
		Intelligent	Intelligent PDU 24 ports (optional)
Refrigeration system	Power Supply		Mains power supply
	Cooling Capacity		3.7-25kW
	Installation Method		Rack-mount/array can be chosen
	Inlet Outlet Method		Air flow out from ahead and circle to back
	Compressor Type		Variable frequency
Monitoring system	Dynamic Environment Monitoring		Intelligent intergrated monitoring host
			Standard power collection
	Environment Monitoring		Smoke sensor*1, can have an addition
			Temperature&humidity sensor(optional)
			Water leakage sensor*1
			Webcam(optional)
			Infrared detector(optional)
	Other Optional Accessories		SMS alarm(optional)
			Audible and visual alarm(optional)

The above parameters are for reference only, the actual configuration parameters are based on customer needs.