Trusted Provider of Network Power Solution

iSmart Series
Integrated Cabinet Solution

Product Solution

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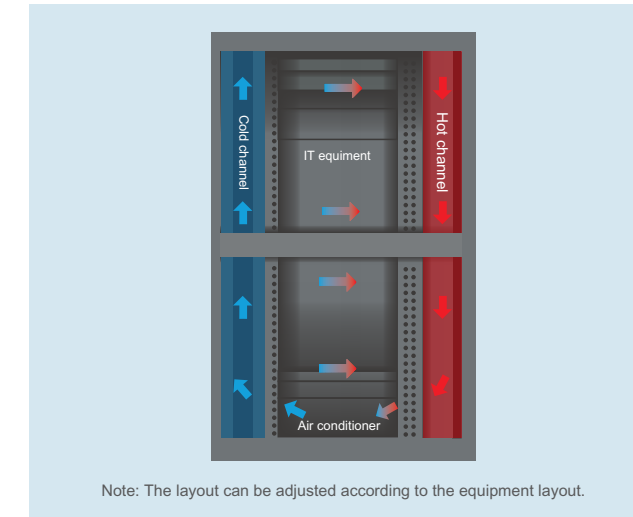
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iSmart Series Integrated Cabinet Solution

iSmart Product Introduction ▼

The iSmart series integrated cabinet solution integrates UPS, air conditioner, power distribution module, power and environment monitoring system, temperature and humidity detection, light and access control in a standard server cabinet. All equipment is pre-installed and pre-commissioned in the factory. The on-site installation is easy and convenient, which can realize rapid deployment, occupy less area, and comes with remote web interface monitoring function, which can realize remote operation and maintenance of a site.

Applicable Scene ▼

- Computer rooms of medium and small enterprises, large enterprises, government branch offices.
- Financial business offices, communication business halls and base stations.
- Commercial retail institutions, tourist attractions.
- Gas stations, toll stations, smart buildings.
- Grassroots public security agency, government agency.

Floor area ▼

The overall area of a single cabinet is 0.72㎡, which is suitable for computer rooms within 10-20㎡.

System Capacity ▼

Capacity of single cabinet≈3kVA

Airflow Reference Chart ▼

Cold channel
Hot channel
IT equiment
Air conditioner

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

Application Scenario ▼

Product Features ▼

✚ Safe and reliable

- All components follow domestic and international standardized production standards 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.
- A single cabinet is a complete system, suitable for various complex scenes (dust, narrow space, no insulation measures, etc.).
- Integrated design, overall delivery, avoid system design problems.
- The door pop-up system can delay the aisle overheating and reserve time for data backup.
- The cabinet integrates an intelligent monitoring system to ensure the safe and reliable operation of the computer room.

🔧 Easy installation and rapid deployment

- Modular design of power distribution, easy installation and maintenance.
- Rack-mounted air conditioner indoor unit, pipe thread connection, easy maintenance.
- The computer room does not need special decoration treatment, and the equipment is ready to use. Installation and commissioning cycle only need 3 hours.
- A single cabinet is a complete system, plug and play.

⟳ High efficiency and energy saving

- The power distribution, UPS, monitoring, and refrigeration cabinets are integrated to save space.
- Engineering free design, free decoration and wiring, remote operation and maintenance are not on duty, saving TCO.

🏠 Intelligent management

- The monitoring system is extensible and compatible with third-party monitoring systems; friendly HMI.
- Support local and remote WEB interface access, SMS alarm function.

Cooling System

Split-type ▼

The VCS series split-type variable frequency air conditioner provides refrigeration for the cabinet-level data center and maintains the temperature and humidity in the data center within the required range to ensure the safe operation of servers, power supplies and other equipment. Mainly used in single-cabinet, multi-cabinet micro-module computer room and micro-module computer room with high thermal density. High-efficiency refrigeration close to the heat source. Provide efficient, energy-saving, and reliable cooling services for users' cabinet-level data centers.

Integrated-type ▼

The VCS series integrated rack air conditioner mainly provides temperature control solutions for single-cabinet/multi-cabinet micro-module data room. High-efficiency refrigeration close to the heat source. It is mainly easy to install, especially it can be pre-installed into a single cabinet, and there is no need to commissioning test the air conditioner on site.

Product Configuration ▼

iSmart Series Integrated Cabinet Solution		
System	IT rated power	3kW
	Mains	220Vac,50Hz/60Hz
	Ambient temperature	0-45℃
	Ambient humidity	10-95% (Relative humidity)
	IP Class	IP5X
	Altitude	1000m, dereating for >1000m
Cabinet	Dimension（W*D*H)	600*1200* 24U (Without caster)
	Space occupation	≤13U
	Display	10.1" touch screen LCD
	Lighting	Front and rear LED, front Tri-color LED
	Cable entry	Top and bottom
	Access control system	Fingerprint +IC/ID card + Password
Power Supply and Distribution System	Distribution module	Main CB,UPS CB, air conditioner CB, PDU CB, Class C arrester
	UPS	Rackmount, 3kVA
	Battery	Built-in battery or external battery cabinet
	PDU	2pcs, 16 ports (13*C13+3*C19)
Monitoring System	Supervision system	Intelligent integrated monitoring host
	Single cabinet	Single cabinet control module
	Centralized Monitoring	smoke sensor*1
		Temperature&humidity sensor*1
		Water leakage sensor*1
		Webcam(optional)
		Infrared detector(optional)
		SMS alarm (optional)
Emergency Ventilation	Method	Emergency pop-up door system
Cooling System	Rated cooling capacity	3.7kW
	Rated air volume	700m³/h
Mechanical	Package dimensions	720*1338*1930mm
	Cabinet color	Black (RAL9004)

Standard Parts and Optional Parts List ▼

Standard Parts	Intelligent Control Screen	Single Cabinet Control Module	Power Distribution Module	PDU*2	Tri-color LED	Lamp
	Outdoor Unit	Indoor Unit	Access Control	Temperature& Humidity Sensor	Water Leakage Sensor	IC Card
Optional Parts	UPS	Infrared Detector	Cover Plate	Webcam	SMS Alerter	Audible and Visual Alarm
	Floating Nut	Battery Pack	Battery Cabinet	IC/ID Card	Rail	Tray

Power and Environment System

Product Introduction ▼

The power and environment system adopts the centralized monitoring of IoT, the composition of the local power and environment monitoring host and the expanded control module, providing a set of the computer room monitoring system with complete functions, flexible deployment and high reliability

- Support the intelligent detection of all equipment such as UPS, air conditioner, power distribution, environmental detection, security, fire protection, etc.;
- Support multiple monitoring methods such as local LCD, local web, cloud web, mobile APP, etc.;
- Support multiple alarm methods such as telephone, SMS, email, audible and visual alarm;
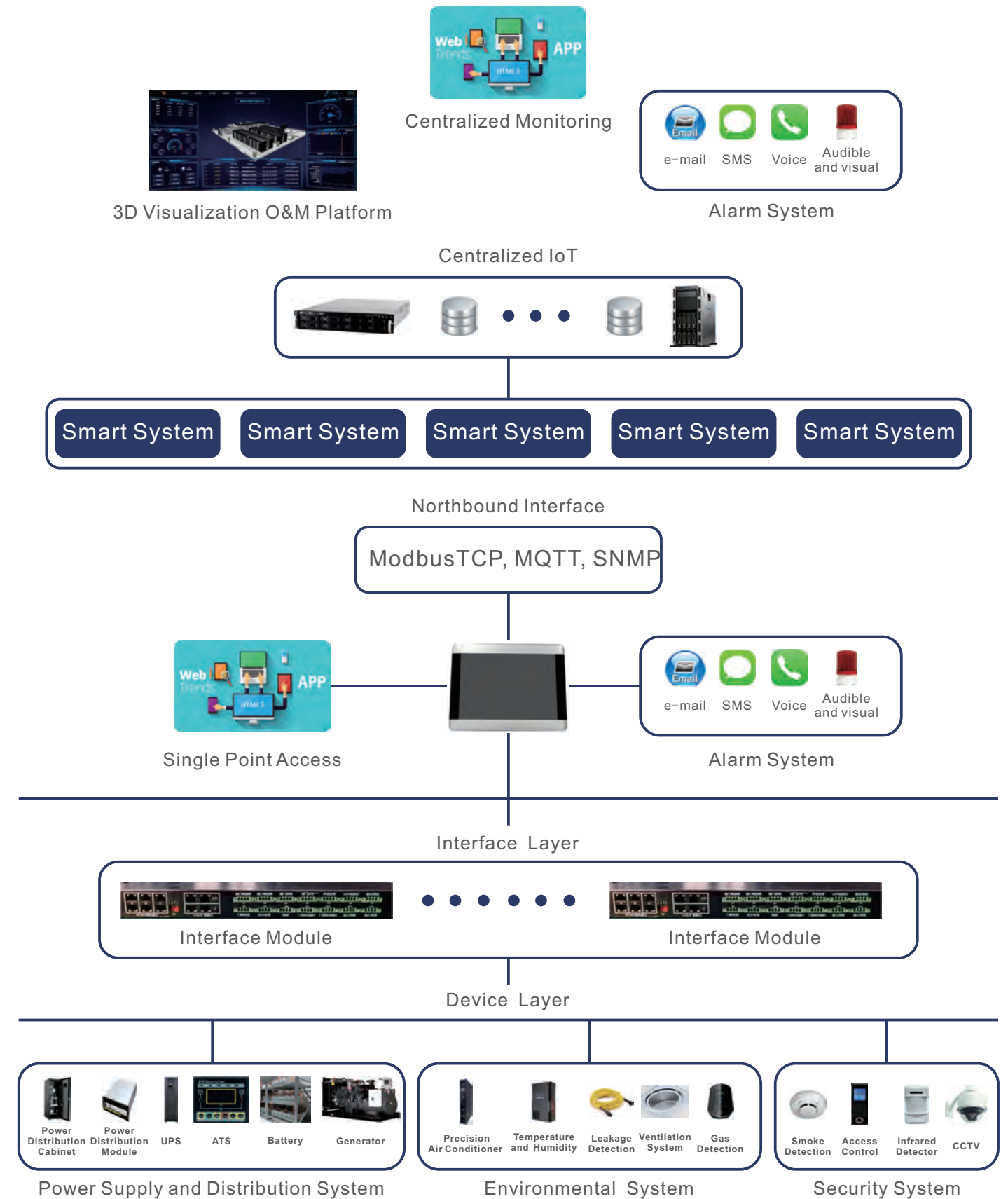- Support multiple northbound interfaces such as MQTT, ModbusTCP, SNMP, etc.;

Monitoring Interface ▼

Performance Characteristics ▼

Complete history record, with event processing record function, and download and export

Standardized connection makes implementation easier and faster.

Modular design,easy to install and maintenance.

LCD monitor
Mainframe visual management

WEB access setting, no need for B/S structure software Installation

Diversified warning methods, such as SMS, mail files, sound and light.

Built-in large-capacity SD card can store long time history events and data records.

Monitoring Network Diagram ▼

Centralized Monitoring

3D Visualization O&M Platform

e-mail   SMS   Voice   Audible and visual

Alarm System

Centralized IoT

Smart System   Smart System   Smart System   Smart System   Smart System

Northbound Interface

ModbusTCP, MQTT, SNMP

Single Point Access

e-mail   SMS   Voice   Audible and visual

Alarm System

Interface Layer

Interface Module   Interface Module

Device Layer

Power Distribution Cabinet   Power Distribution Module   UPS   ATS   Battery   Generator

Precision Air Conditioner   Temperature and Humidity   Leakage Detection   Ventilation System   Gas Detection

Smoke Detection   Access Control   Infrared Detector   CCTV

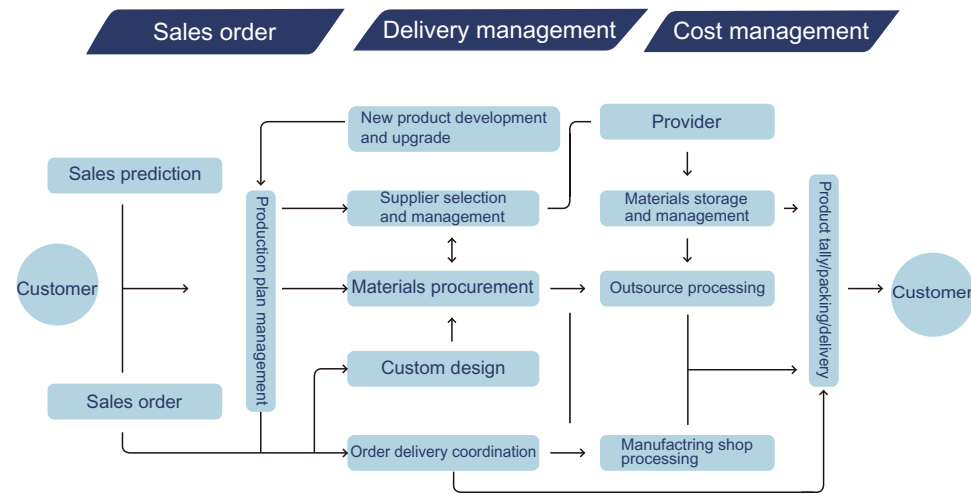Power Supply and Distribution System   Environmental System   Security System

Integrated Service System

Excellent operation management ▼

Process-based standardized management realizes high-efficiency, quality and cost management.

Implement a fully integrated service system, with customer demand as the starting point, customer satisfaction as the end point, and carry out product life cycle control.

Applications ▼

Education Industry

- Nanjing University of Posts and Telecommunications
- Xinchang College, Zhejiang Radio and Television University
- Xinchang County Chengdong Experimental School
- Xicheng Kindergarten, Jintan District, Changzhou City
- Hebei Dingxing Middle School
- Taiyuan University of Technology
- Harbin Songjiang Education Bureau
- Nanjing Agricultural College
- Fangshan Branch of Nanjing Foreign Language School
- Shaanxi University of Technology
- Taiyuan Normal University
- Sinan Middle School of Guizhou Province
- Tianjin No. 100 Middle School

Medical Industry

- Heilongjiang Cancer Hospital
- Shantou Chenghai Maternity and Child Health Hospital
- Yangchun Gangqiao Hospital of Yangjiang City
- Xiangtan County Maternal and Child Health Hospital
- Haicheng Central Hospital
- Pingtang County People's Hospital
- The First People's Hospital of Wuhu
- Shanxi Cancer Hospital
- Shanwei City Health and Family Planning Bureau
- Zhangjiakou Maternity and Child Health Hospital
- Baishui County Hospital of Traditional Chinese Medicine
- People's Hospital of Zheng'an County, Zunyi City
- Beishan Hospital, Wuzhou Workers' Hospital

Government Agency

- Zhuhai City Health and Family Planning Bureau
- Shenzhen Yantian Commission for Discipline Inspection
- Kunming Highway Bureau
- Qinghai Water Resources Bureau
- Suzhou City Government Building 5
- International Migration Administration
- Yugan County People's Government
- Wuzhong District Political and Legal Committee
- Yuncheng Grain Bureau
- Changzhou Xinbei District Government
- Anyang Meteorological Bureau
- National Bureau of Statistics Zhuzhou Investigation Team
- Education Bureau of Songbei District, Harbin City

Judicial and Enforcement Agency

- Dali City People's Procuratorate
- Hubei Provincial People's Procuratorate
- Luliang City Intermediate People's Court
- Heping District People's Court of Shenyang City
- Beipiao Intermediate People's Court
- Rizhao Court of Qingdao Maritime Court
- Dongchuan Public Security Branch of Xining City
- Public Security Bureau of Binzhou City, Xi'an
- Hengkou Public Security Bureau of Ankang City
- Le'an County Forest Public Security Bureau
- Baimalong compulsory drug rehabilitation, Hunan Province
- Chaling County Prison, Zhuzhou City
- Bingtuan Prison Administration Command Center

Service Industry

- Zhumadian Children's Palace, Henan Province
- Taicang Radio and Television Station, Jiangsu Province
- Suqian Radio and Television Station, Jiangsu Province
- Jilin TV Station
- Huaibei Daily News
- Computer Room of Hengyang Hongguang Logistics Park
- Jiudongtian Tourist Scenic Area
- Zhijindong Scenic Area, Bijie City
- Wulingyuan Scenic Area, Zhangjiajie City
- Wuhan Botanical Garden, Chinese Academy of Sciences
- Dongying Huatai Hotel
- Changsha Convention and Exhibition Center Hotel
- Lhasa Wanda Shopping Center, Tibet Autonomous Region

Other Applications

- Zhangjiagang Power Supply Bureau
- Changsha Research Institute of Mining and Metallurgy
- Zhangjiagang Feixiang Chemical Computer Room
- Hebei Chengan Rural Credit Cooperative
- Kunlun Bank, Urumqi Yingbin Road Sub-branch
- Changde Economic Investment Data Center
- Hengyang Rural Commercial Bank
- Jilin Agricultural Credit Company
- Suzhou Wuzhong Economic Development Zone
- Lanzhou New District Flower Auction Center
- Huaqin Communications Wuxi R&D Center
- CRRC Changde Production Base
- Office Building of Hami Tobacco Company