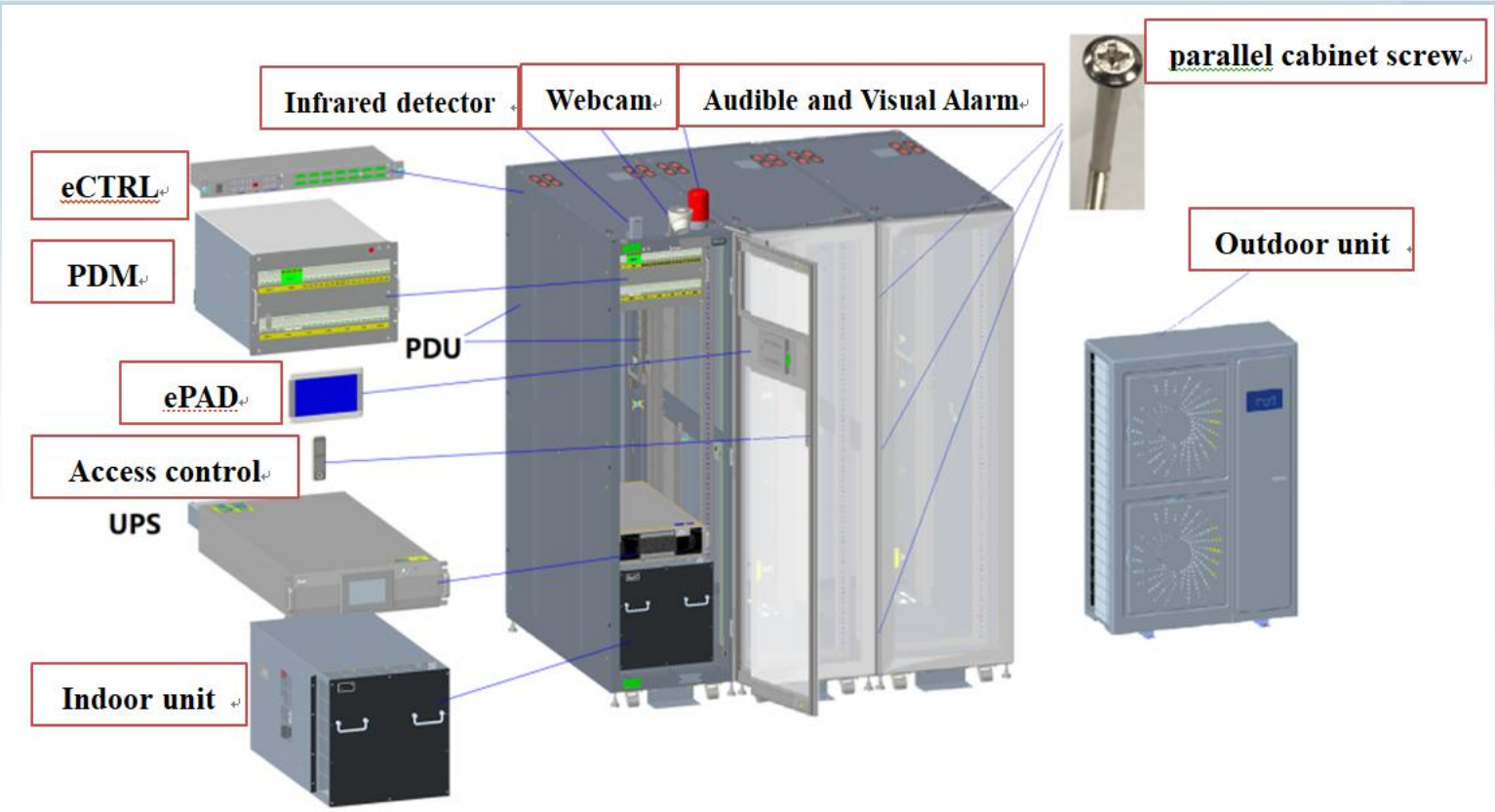
INVT Network Power(Shenzhen) Co., LTD

iWit Series Integrated Cabinet Solution

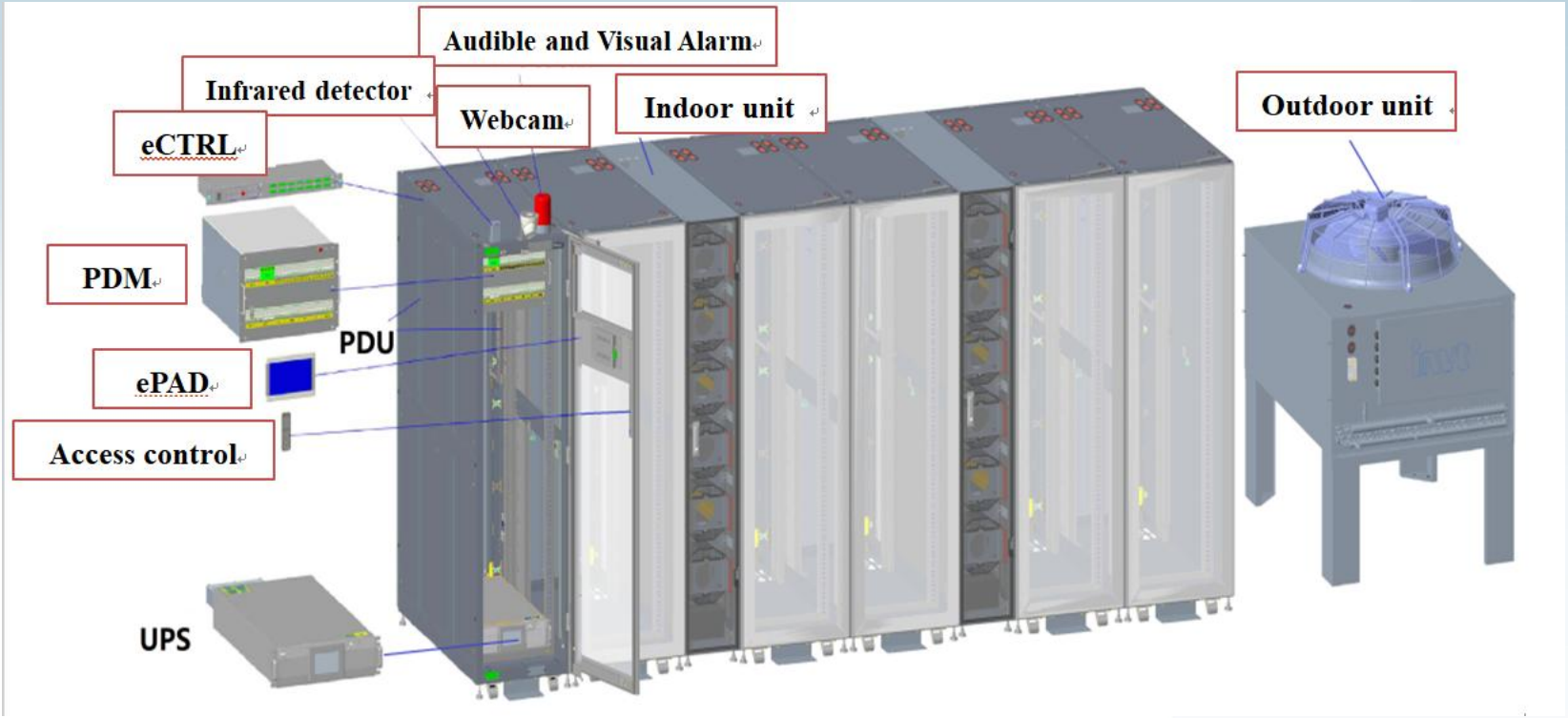
Overseas Department

2021-10-09

1. Appearance



iWit 3 cabinets with monitoring system（Rack air conditioning）



iWit 6 cabinets with 2 monitoring system（Column between air conditioning）

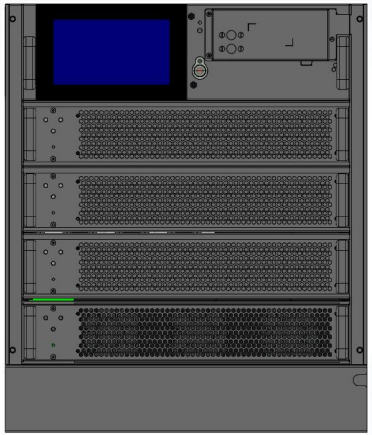
2. Features

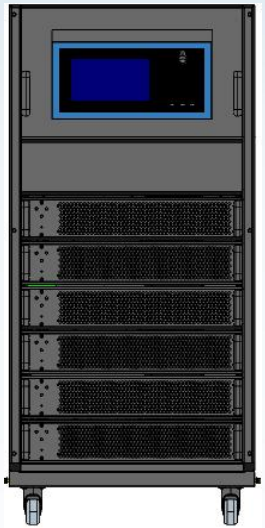
◆Closed hot and cold aisles, high efficiency, strong environmental adaptability;
◆Cabinet dimension (W*D*H): 600mm*1400mm*2000mm;
◆Emergency pop-up door component: front and back door automatically pop-up after the fault is triggered , buy time for customer;
◆Integrated power supply and distribution: the power distribution module contains main input breaker , SPD, UPS breaker , PDU , air conditioner breaker , etc ;
◆Powerful Monitoring system: the power and environment information can be viewed on the 10.1-inch touch LCD, and it can also be monitored through WEB . If you access the INVT cloud service platform, you can directly monitor the power and environment information on the cloud service platform;
◆Rapid deployment: pre-installed design, the entire system can be installed and put into use in one day.

3. Power Distribution System

UPS–Uninterrupted Power Supply

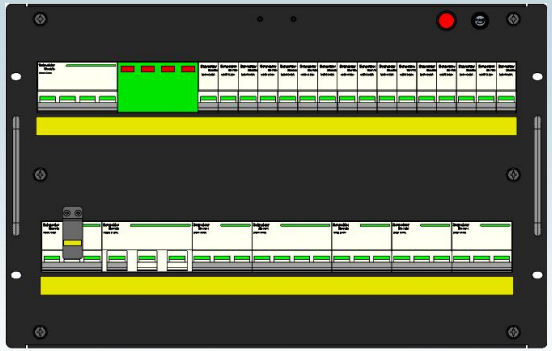
10K, 15K or 20K single-phase rack UPS system can be selected according to the load, also can choose the 15K, 20K rack 3/1 UPS system, or choose the 25K 3/3 rack UPS system even RM020/10X~ RM090/15X UPS system , and battery box or battery cabinet products can be selected according to actual requirement.

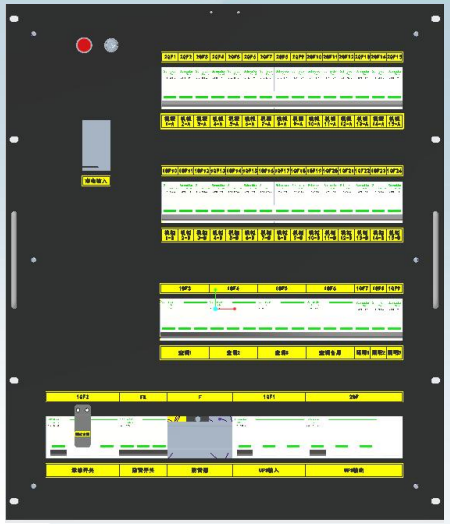




PDM (Power Distribution Module)

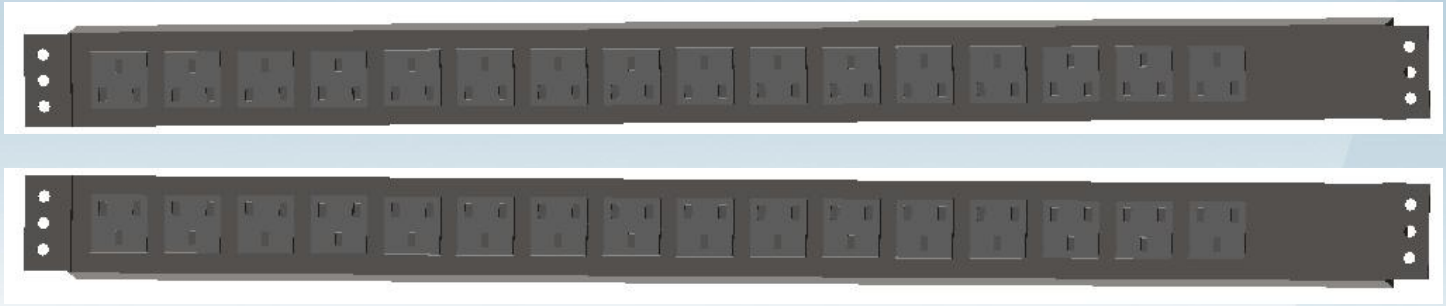
Power distribution module: comes with main input breaker, SPD and lightning protection breaker, UPS input, output and maintenance bypass breaker, mains PDU breaker, UPS PDU breaker, air conditioning breaker, spare breaker, etc;





3U PDM 1（IT Maximum full load 8KVA）	12031-00041	PDMI0080-003
7U PDM 1（IT Maximum full load 10KVA）	12031-00038	PDMI0080-001
7U PDM 2（IT Maximum full load 20KVA）	12031-00039	PDMI0125-002
7U PDM 3（IT Maximum full load 10KVA）	12031-00040	PDMI0080-002
7U PDM 4（IT Maximum full load 20KVA）	12031-00029	PDMI0125-001
13U PDM 1（IT Maximum full load 30KVA)	12031-00042	PDMI0160-001
13U PDM 2（IT Maximum full load 50KVA)	12031-00043	PDMI0200-001

PDU



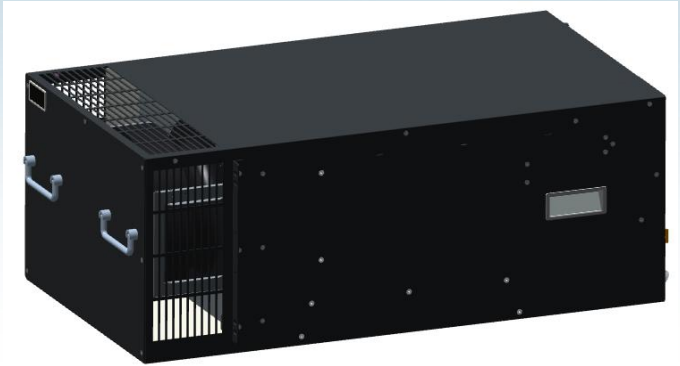
Standard IEC PDU： 13pcs 10A outlets and pcs 16A outlets IEC standard, One at the rear of the cabinet (directional).

Intelligent PDU（optional）

Optional intelligent PDU equipment: IEC standard, current ,voltage , and work status data can be checked through the monitoring system. At the same time, it can control the on and off of each output socket.

4. Cooling System

7.5kW Rack-mounted
AC indoor unit



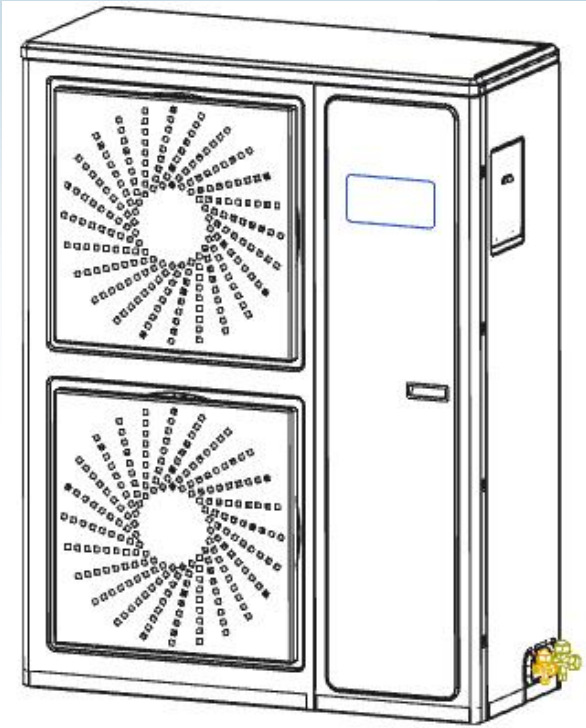
7.5kW Rack-mounted
AC outdoor unit

Rack-mounted precision air conditioner indoor unit (7U high) is a DC inverter air conditioner , which adopt DC inverter compressor, EC fan, electronic expansion valve, continuously variable outdoor fan .

12.5kW Rack-mounted
AC indoor unit

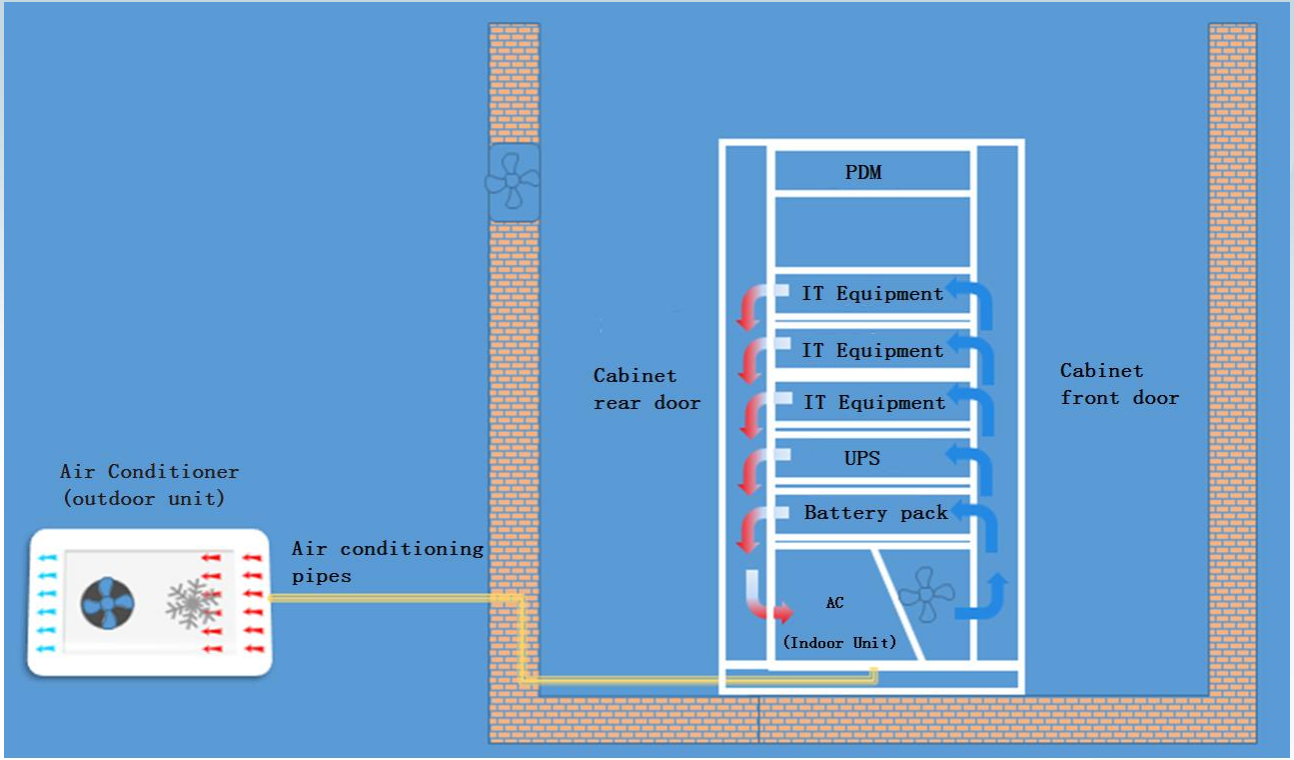
Rack-mounted precision air conditioner indoor unit (10U high) is a DC inverter air conditioner , which adopt DC inverter compressor, EC fan, electronic expansion valve, continuously variable outdoor fan .

12.5kW Rack-mounted
AC outdoor unit

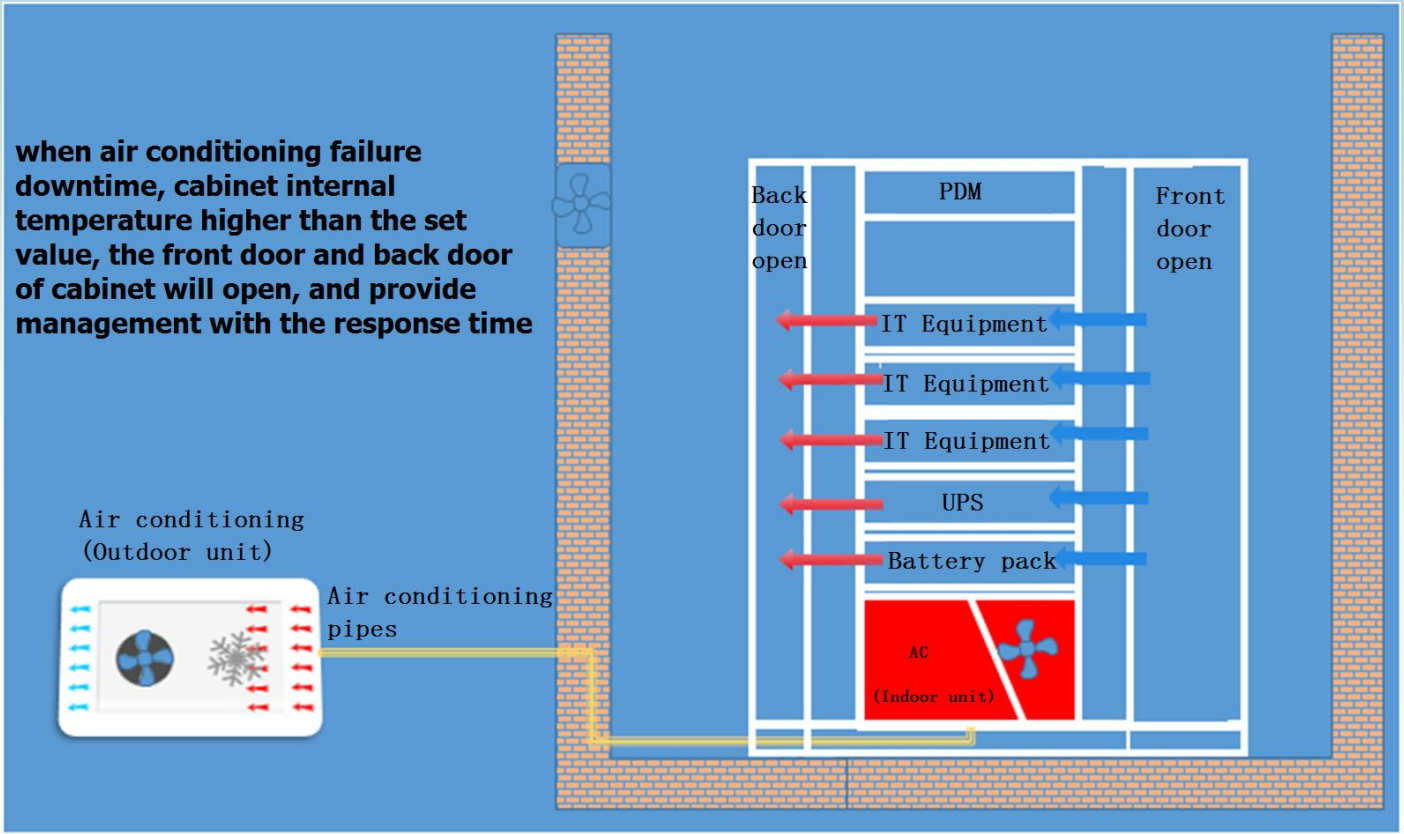


12.5kW/25kW in row
AC indoor unit

12.5kW/25kW in row
AC outdoor unit

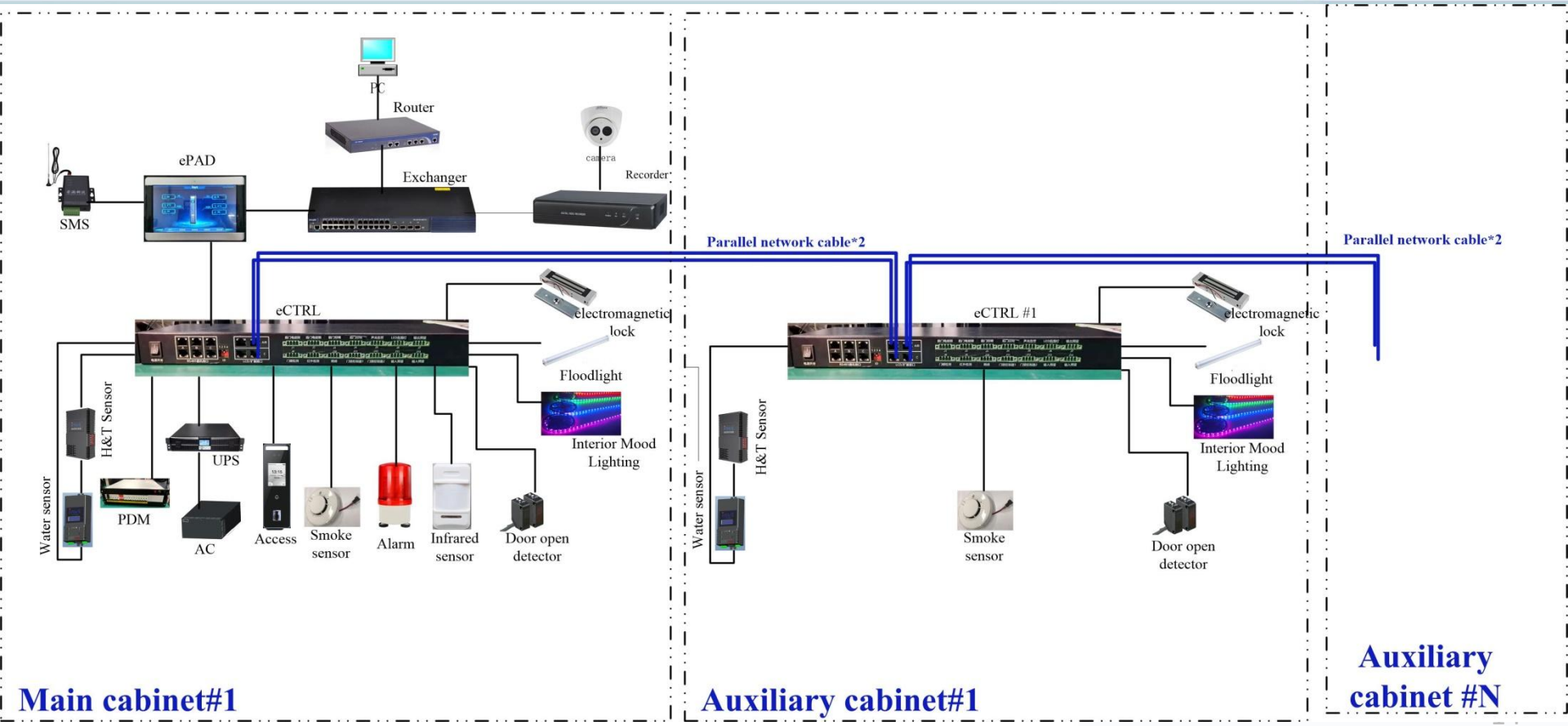


Front and back door are closed ,when AC is on normal mode of operation.

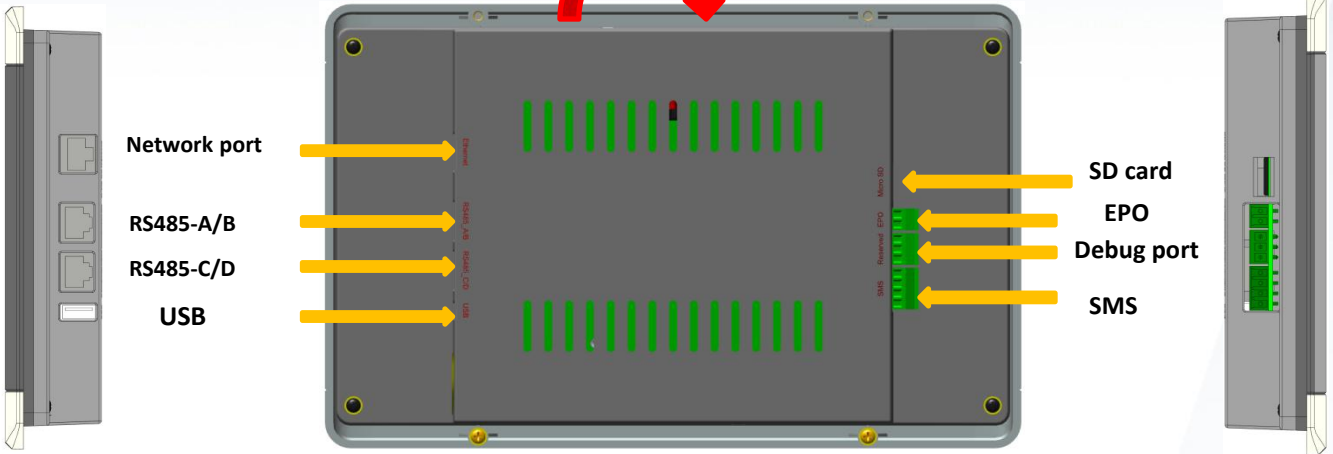


Front and back door are popped up ,when AC has a breakdown.

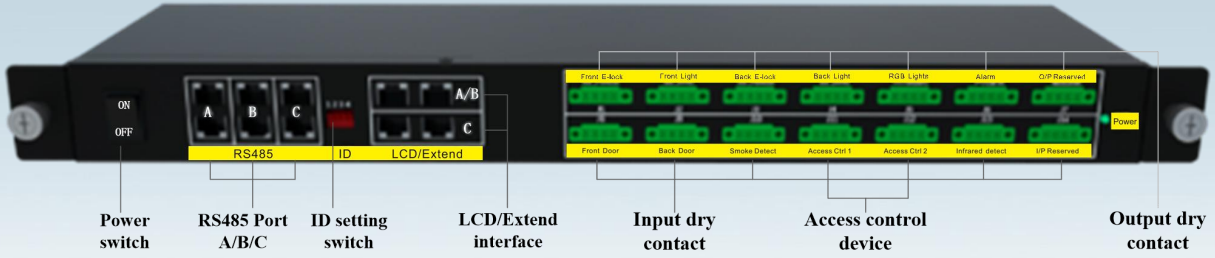
5. Monitor Management System

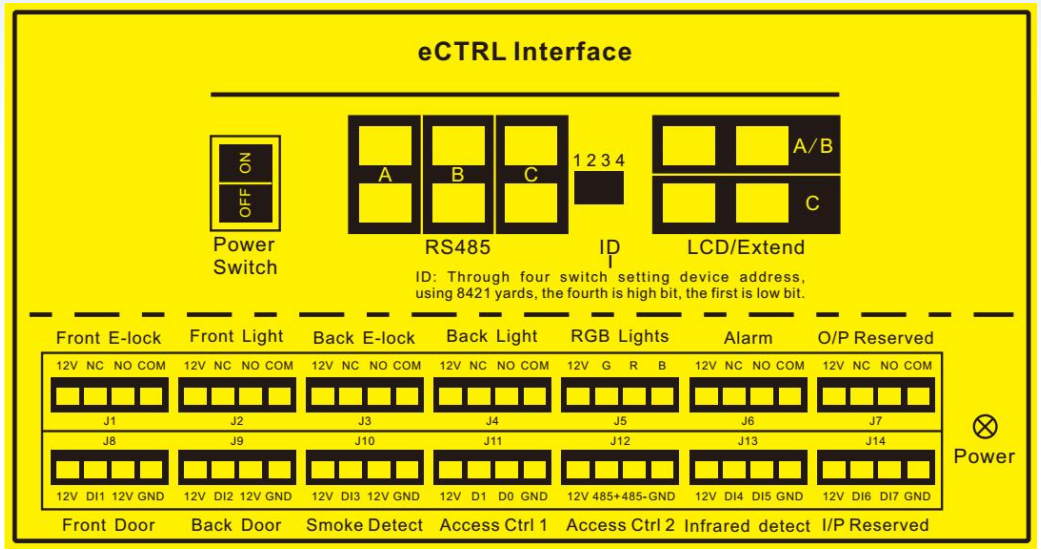


10.1 inches Intelligent Monitoring Screen



eCTRL-Expanded or Auxiliary Tank Control Module





The expanded control module is placed at the top back of the cabinet and does not occupy the available space of the cabinet. Its function is to provide 12V power supply for the 10.1-inch screen, communicate with the monitoring screen, control the door opening and closing of the cabinet, detect the status of the door, control the lights in the cabinet, environmental detection, and cabinet signal connection, etc.

Access Control

Access control all-in-one machine as a device for authority management, combined with an intelligent monitoring screen, can realize the functions such as opening and closing the cabinet door, identification, user management, password/fingerprint/face recognition setting and modification.

Item	Parameter
Voltage	12VDC
Recognition	Fingerprint, face recognition, ID card/IC card, password
Screen	2.4inch TFT HD color screen
Language	Chinese, English
Communication	TCP/IP
User number	Up to 3000 users; up to 10 administrators
Environment	temperature：-5℃-+45℃； Relative humidity:≦95%(non-condensing)
Dimension	185*58.5*19mm

Temperature and Humidity Sensor

Equipped with one in the cold aisle to monitor the temperature and humidity of the cold aisle. There are a network ports on the upper and lower of the sensor.

Item	Parameter
Temperature Detection range	-40℃-+125℃
Temperature Detection accuracy	±0.2℃
Operating temperature	-20℃-+80℃
Humidity detection range	0~100%
Humidity detection accuracy	±4%
Operating Voltage	12VDC
Dimension	125*64*37mm

Water Leakage Sensor

A system is equipped with a water leakage sensor to monitor the water accumulation at the bottom of the cabinet. There are 2 network ports on the top of the sensor.

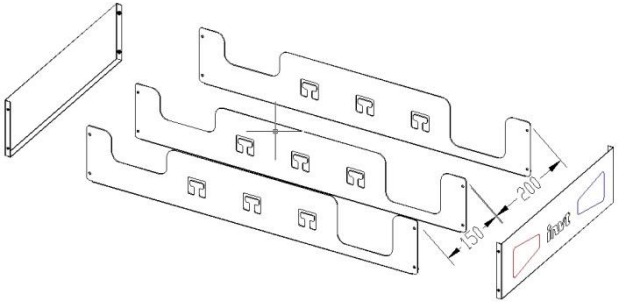
Item	Parameter
Operating Voltage	12VDC
Operating environment	-20℃~+80℃, 0-95%RH (non-condensing)
Precision	Suitable for the sensor with positioning , 1m
Dimension	125*64*37mm

Smoke Sensor and Webcam(optional)

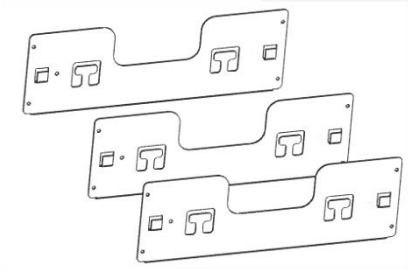
Smoke sensor is installed on the top of the cabinet. It will automatically reset after the smoke disappears.

Webcam is installed on the top of the cabinet or in the room .

M-shaped cable trough



600mm wide cable trough



300mm wide cable trough

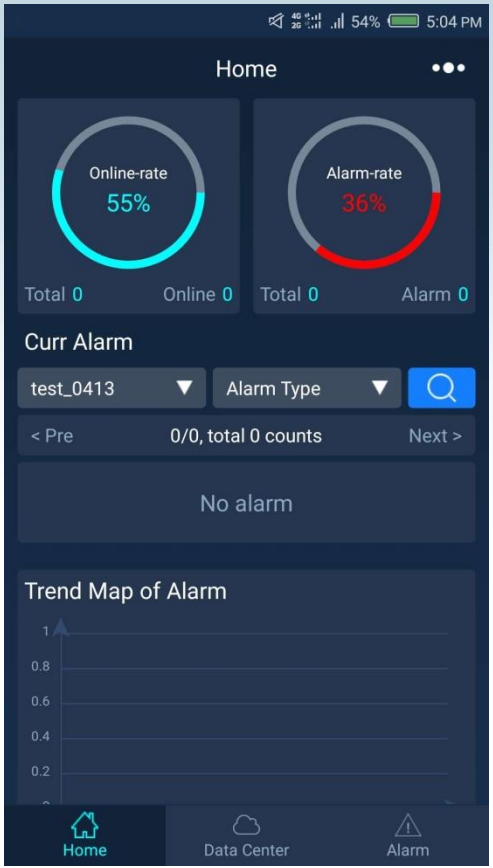
6. HMI

Local monitoring interface： 10.1-inch touch color LCD screen

WEB Monitoring Interface

Monitor all access to online systems and assist in data analysis

Mobile APP interface



8. System Specifications

iWit Series Integrated Cabinet Solution （Enclosed Hot and Cold Aisle ）			
System	Supporting IT Cabinets		Supports 2 to 15 cabinets
	Grid system		Single phase：220Vac,50Hz, 1Ph+N+PE 3 phase：380Vac, 50Hz, 3Ph+N+PE
	Ambient temperature		-20-45℃
	IP Class		IP5X
	Altitude		1000m, >1000m need to be derated
Cabinet	Dimension(W*D*H)		600*1400*2000mm(Does not include casters)
	Display		10.1 inches color capacitive touch screen
	Atmosphere lamp		Front multi-color light
	Lighting method		Front and rear LED
	Cable entry		Top and bottom
	Access control system		Fingerprint + Face recognition + IC&ID card +Password
	Emergency mode		Emergency pop-up door system
Power Supply and Distribution System	Distribution module	Total input current	63-200A
		Lightning protection	Class C
	UPS	Capacity	10kVA-90kVA
		Input voltage	Single phase：220Vac,50Hz, 1Ph+N+PE 3 phase：380Vac, 50Hz, 3Ph+N+PE
		Power distribution	Single phase in and single phase out or Three phase in and single phase out or Three phase in and three phase out
		Battery	Built-in battery or external battery cabinet
	PDU	Standard type	IEC socket*2pcs, 16 ports (13*10A+3*16A)
		Intelligent type	Optional for 24 ports

Cooling System	Power supply mode	Mains power supply
	Cooling capacity	3.7-25kW
	Installation method	Rock or column distribution
	Inlet and outlet method	Outlet in front and inlet in back
	Compressor type	Frequency conversion
Monitoring System	Supervision system	Intelligent integrated monitoring host
		Standard power distribution collection
	Environment monitoring	Smoke sensor*1（addable）
		Temperature & humidity sensor*1（optional）
		Water leakage sensor*1
		Webcam（optional）
		Infrared detector（optional)
	Other device	SMS alarm （optional）
		Audible and Visual Alarm（optional）

9. Q&A session

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