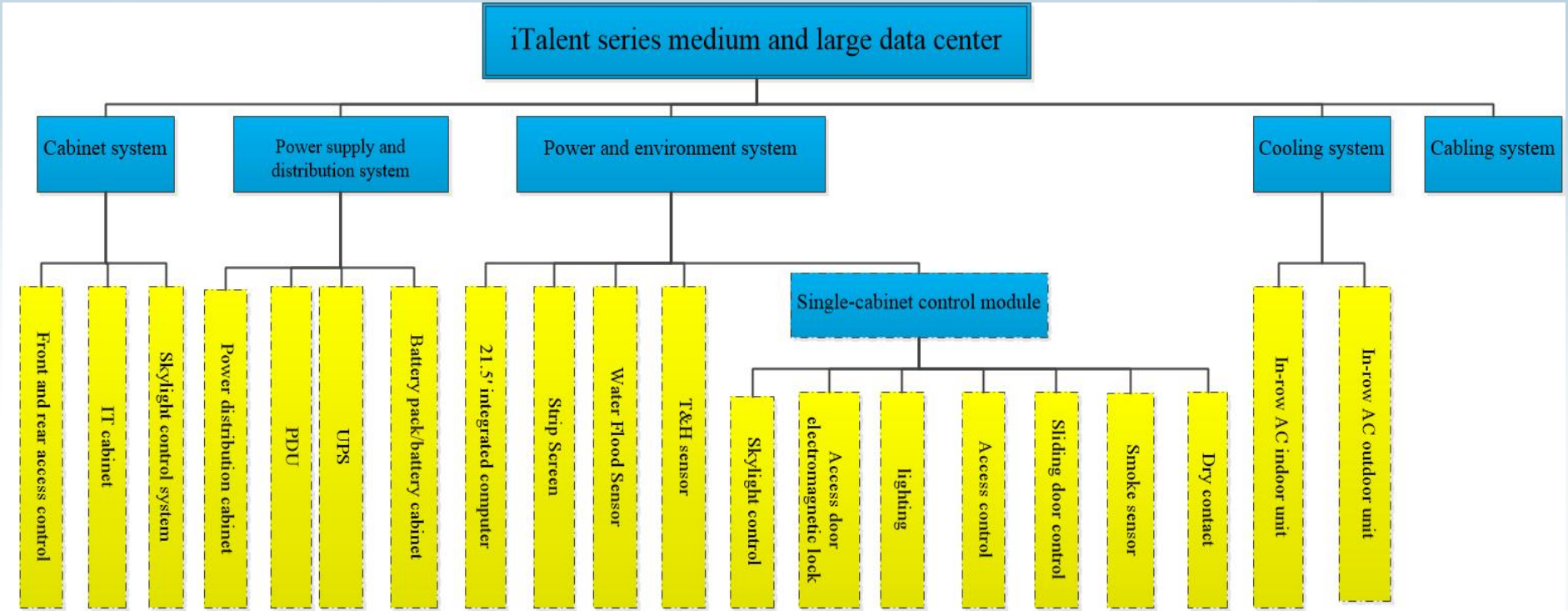
iTalent Series
Medium and Large Data Centers

Overseas Department

1、Product Overview

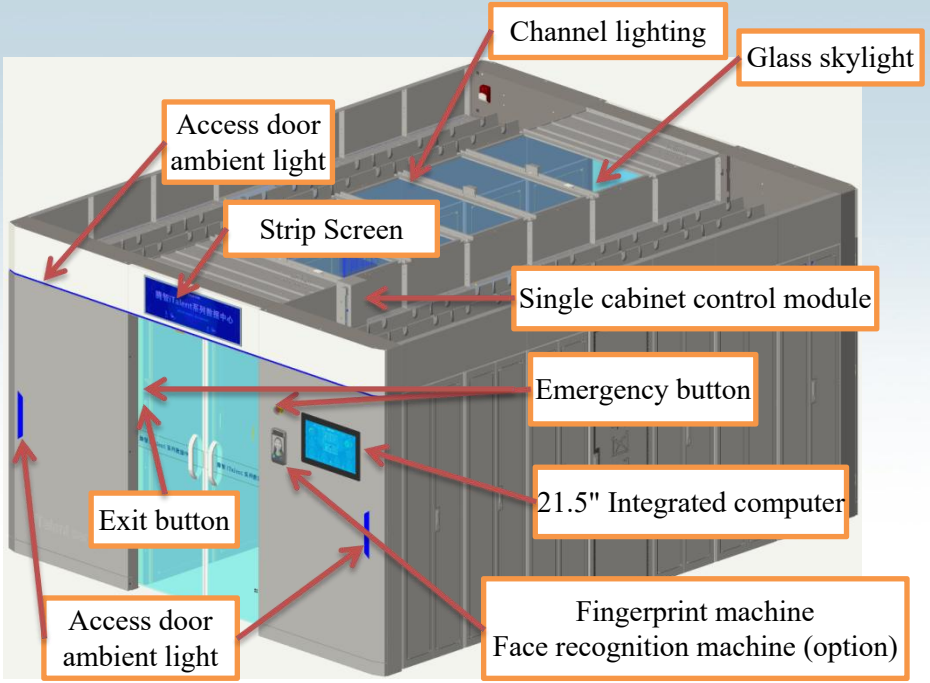
iTalent Series medium and large scale integrated data center adopts integrated solution, integrating cabinet system, power supply and distribution system, cooling system, power and environment system, access control system, skylight control system and integrated cabling system. Closed cold aisle design, matched with in-row air conditioner near-server-side cooling, efficient and reliable, green and energy-saving, with rapid deployment, flexible expansion, safety and reliability, intelligent management and other features.

2、System composition

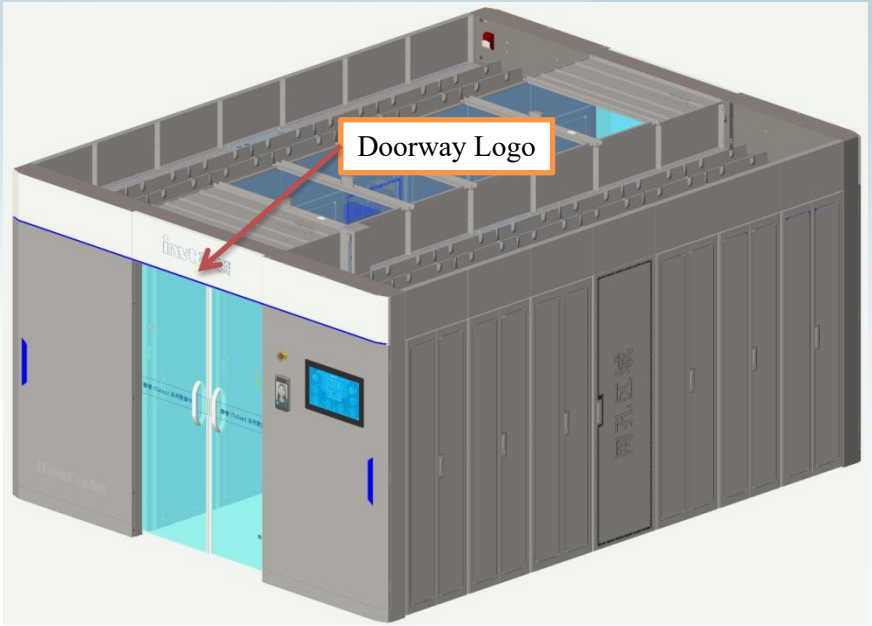


3、Product appearance

Introduction of structural components

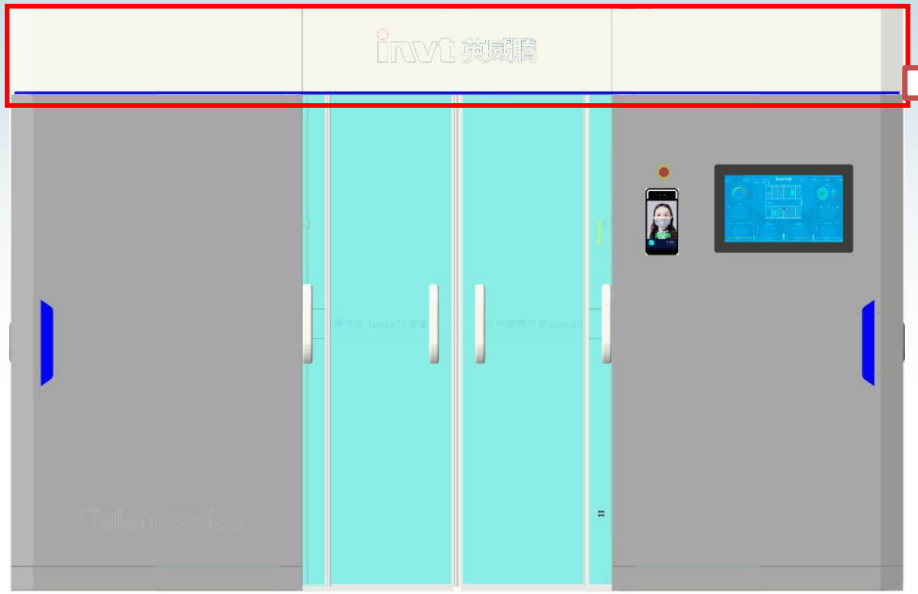


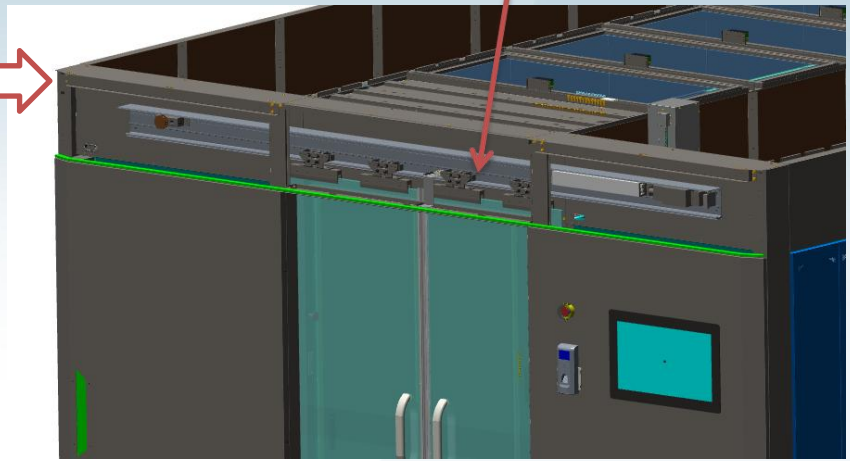
Sliding door with strip screen



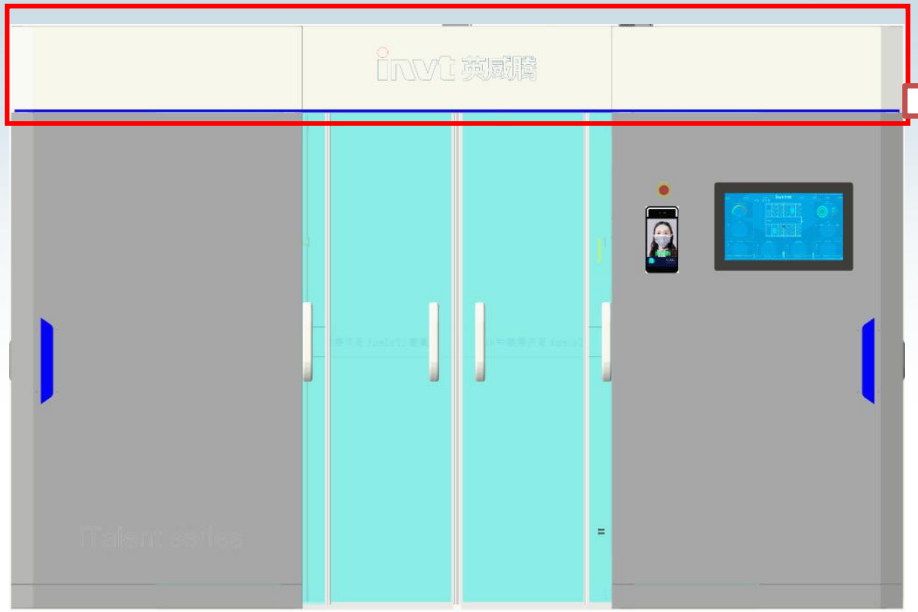
Sliding doors with logo

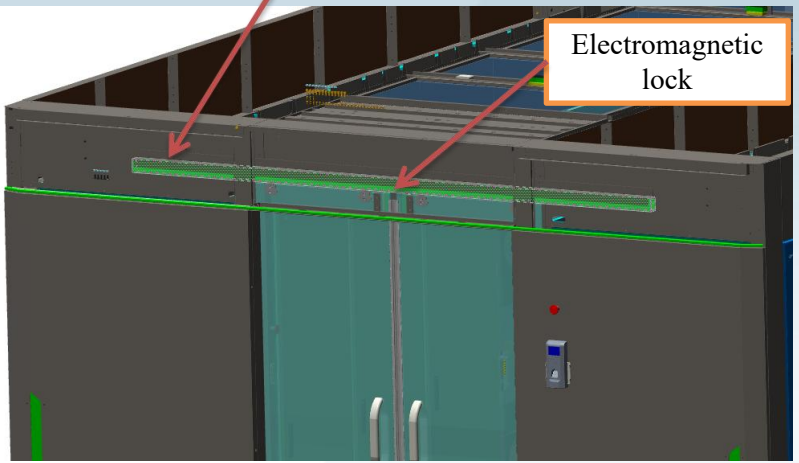
Access door structure- automatic sliding door



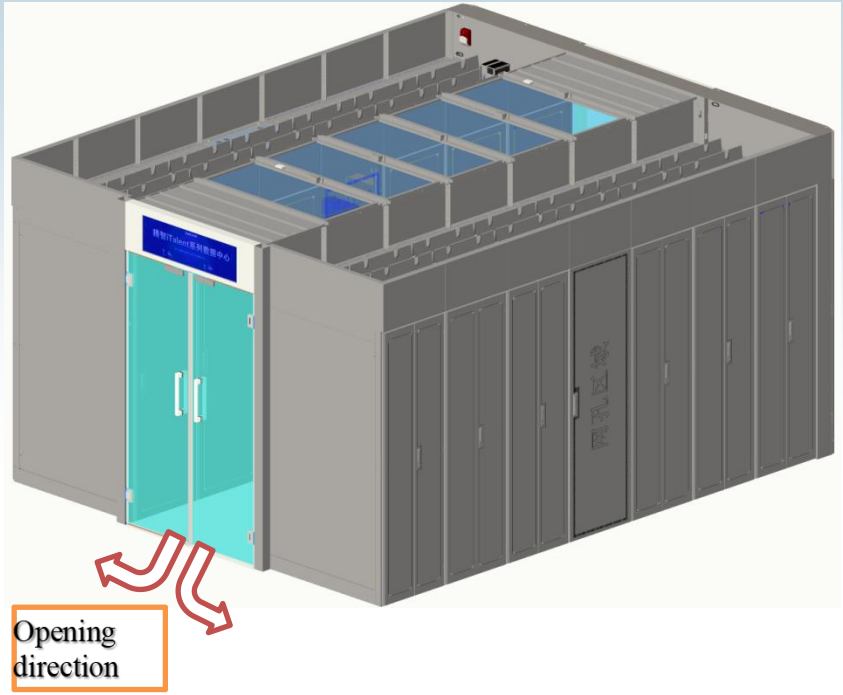


Access door structure-manual sliding doors

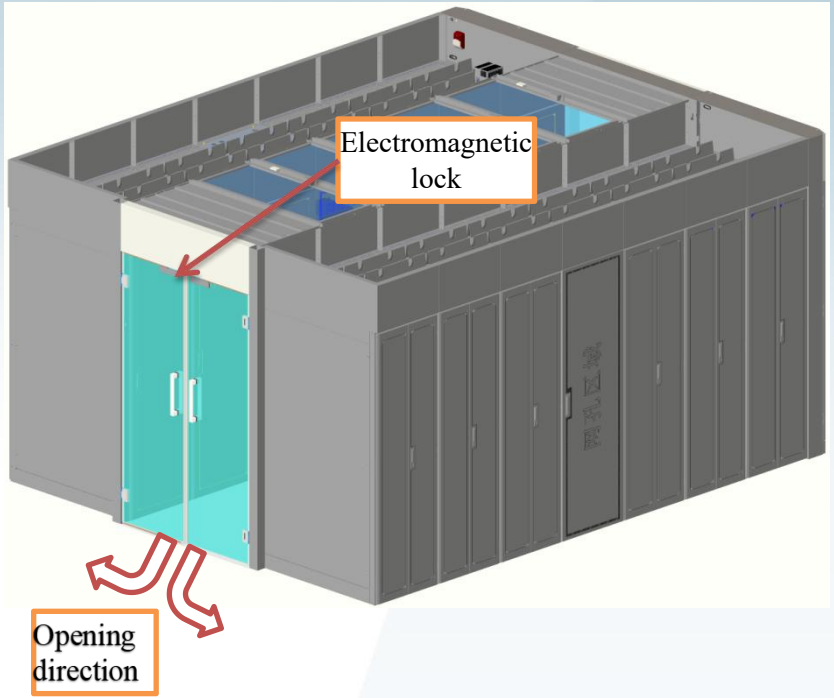




Access door structure-manual rotary doors



Rotary doors with strip screens



Rotary doors without strip screens

4、Product features

1. Simple and generous appearance；
2. automatic sliding doors, manual sliding doors and manual rotating doors are available for access doors.
3. Closed cold aisle with frequency conversion refrigeration air conditioner, with remarkable cooling and energy-saving effect, while equipped with skylight control system to prevent overheating of equipment caused by air conditioner failure.
4. Supporting multiple modes of power supply and distribution.
5. Centralized monitoring, support for remote login management, real-time management, convenient and fast.
6. Plenty of optional parts.

5、Power distribution system

Input breaker & Lightning protection switch

ATS(optional)

UPS input/ output/ bypass

UPS

Support 20-150KVA

6. Cooling system

12.5kW/25kW/30kW in-row air conditioner indoor unit

12.5kW in-row air conditioner outdoor unit

25kW/30kW in-row air conditioner outdoor unit

6. Cooling system

40kW/50kW/60kW in-row air conditioner indoor unit

40kW in-row air conditioner outdoor unit

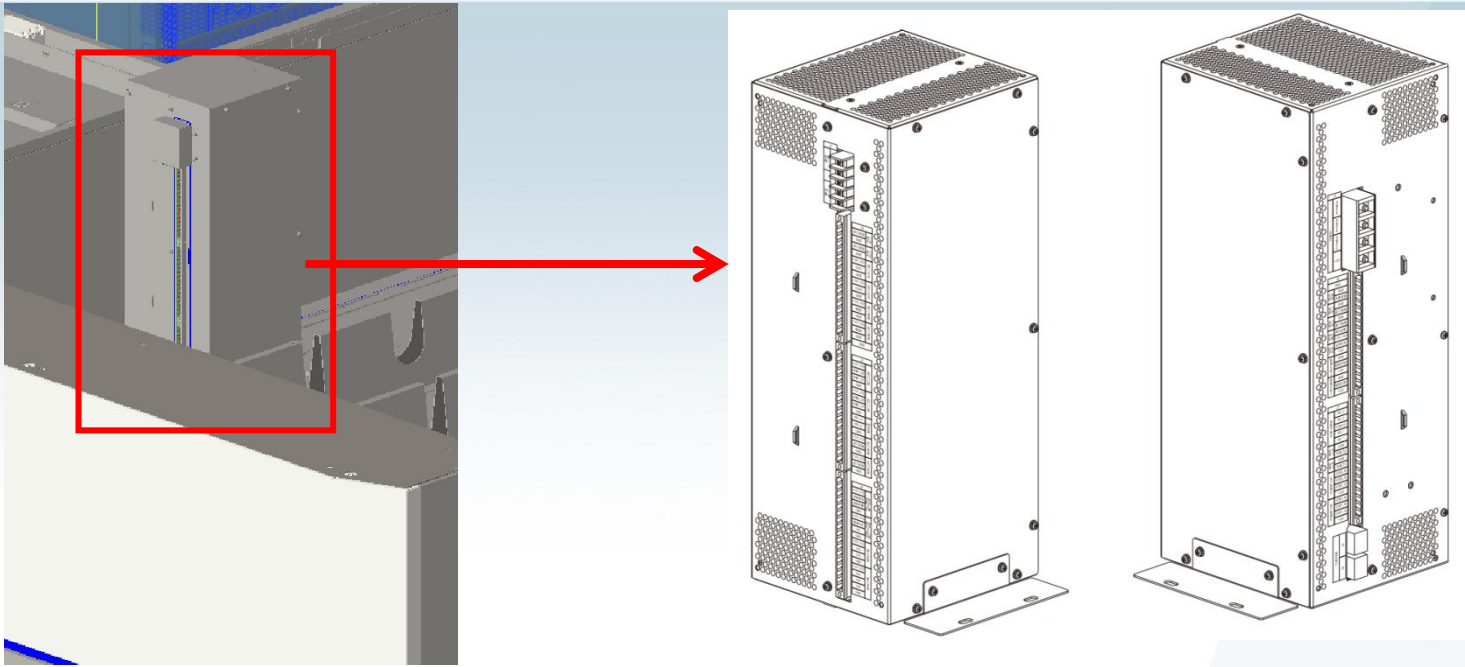
50kW/60kW 40kW in-row air conditioner outdoor unit

7. Power and environment system

Power and environment system host-eMTR

The power and environment system carries out telemetry, telematics, telecontrol and remote control of various parameters of the environment of the server room, such as power supply cabinets, UPS, air conditioners, batteries, etc., as well as access control, infrared, skylight, flooding, temperature and humidity, smoke detection, etc., to monitor its operating parameters in real time, diagnose and deal with faults, record and analyze relevant data, and carry out centralized monitoring and centralized maintenance of the equipment computer control system, the power and environment system host eMTR, as one of the most important equipment of the iTalent system, plays an irreplaceable role in the whole system.

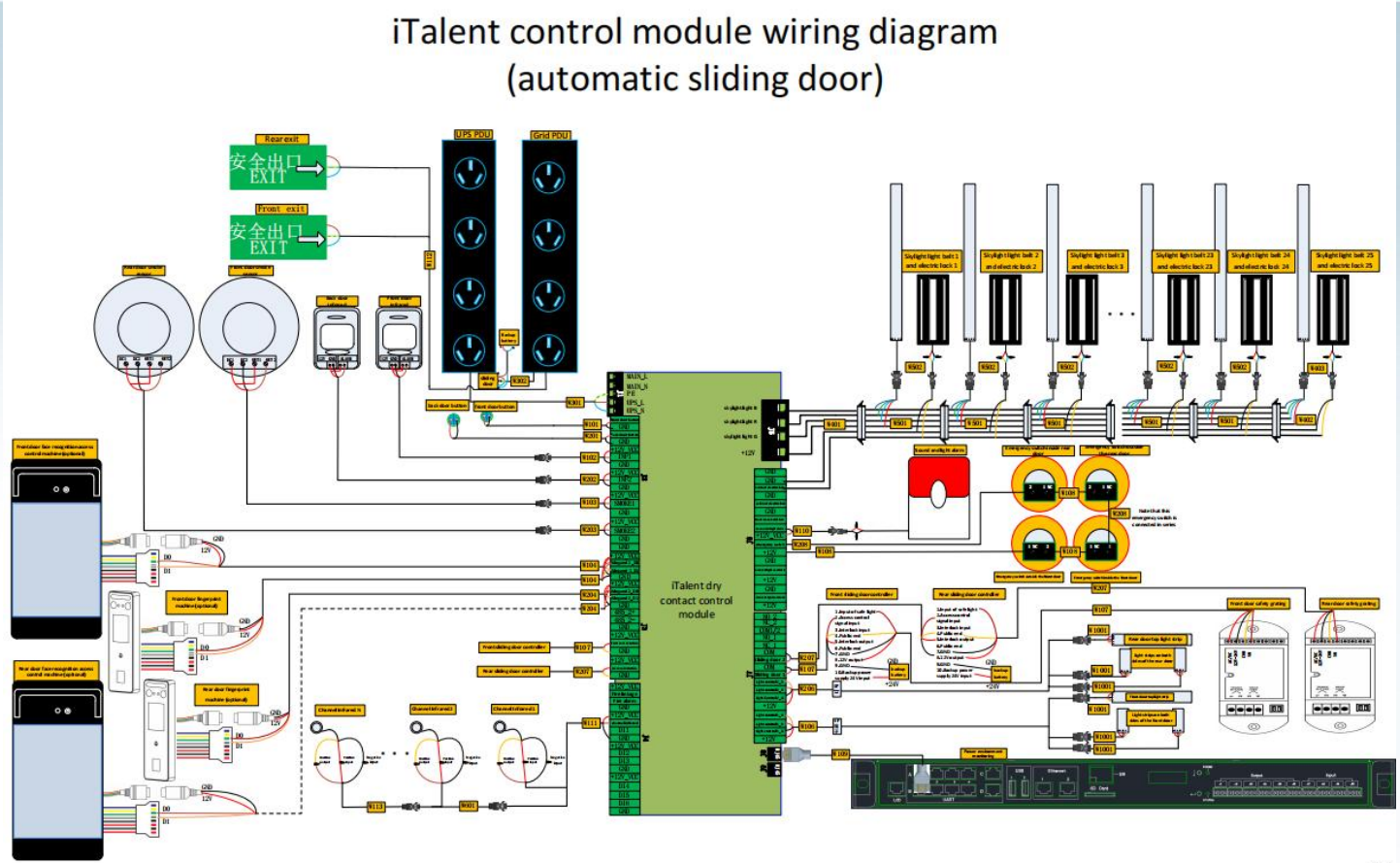
Extended control modules



The expansion control module is placed between the first cabinet and the second cabinet behind the front access door, install one for each project.

Its role is: to provide 12V power supply to all access devices (access control, ambient light, electromagnetic lock, lighting, etc.), communicate with the power and environment host, control the channel door open/close, detect the status of the door, control the lights in the channel, control the lights on the channel door, environmental detection, skylight control, etc.

iTalent expansion control module wiring diagram



Integrated access control machine (default model)

Access control machine as a privilege management equipment, combined with intelligent monitoring screen can realize the role of opening and closing the cabinet door, identification, user management, password / fingerprint setting and modification.

Item	Parameter
Voltage	12VDC
Recognition	fingerprint、ID card/IC card、password
Screen	2.0inch TFT HD color screen
Language	Chinese,
Communication	Weigand
User number	Up to 5,000 users; up to 1,500 fingerprints
Environment	temperature：-10℃-+50℃； Relative humidity:≦95%(non-condensing)
Dimension	180*82*55mm

Face recognition access control machine (option)

Face recognition machine as an option, connected to the Tengiz expansion control module, combined with the dynamic ring system can realize the role of opening and closing the channel door, identity recognition, user management, password setting and modification, etc.

Item	Parameters
Voltage	12VDC
Recognition	Automatic face recognition
Screen	8-inch HD color touch screen, resolution 800*1280
Camera	200W Binocular Live Camera
Identification distance	0.5-2m
Identification time	Less than 300ms
Identification accuracy	99.70%
Language	Chinese
Communication	Wegen, RS485, Network, USB
User number	Up to 20,000 users
Environment	temperature：-15℃-+55℃； Relative humidity:≦90%(non-condensing)
Dimension	246*123*21.5mm

Strip screen (option)

Channel door header strip screen can be static display pictures, dynamic display subtitles, can also play video

Item	Parameters
Dimension	37-inch
Display Resolution	1920*540
Effective display area	904mm*254mm
System Parameters	Android 8.0，1GB DDR3+8GB ROM
Communication	Network, USB
Power supply	AC 110 -240V ， 50/60Hz ， 60W
Environment	temperature：-10℃-+50℃； Relative humidity:≦95%(non-condensing)
Dimension	930*280*34mm

Temperature and Humidity Sensor(optional)

Monitor the temperature and humidity of the cold channel with 1 mesh port on the top and bottom of the sensor.

By default, one sensor is installed at the top of the front and back in the channel.

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(optional)

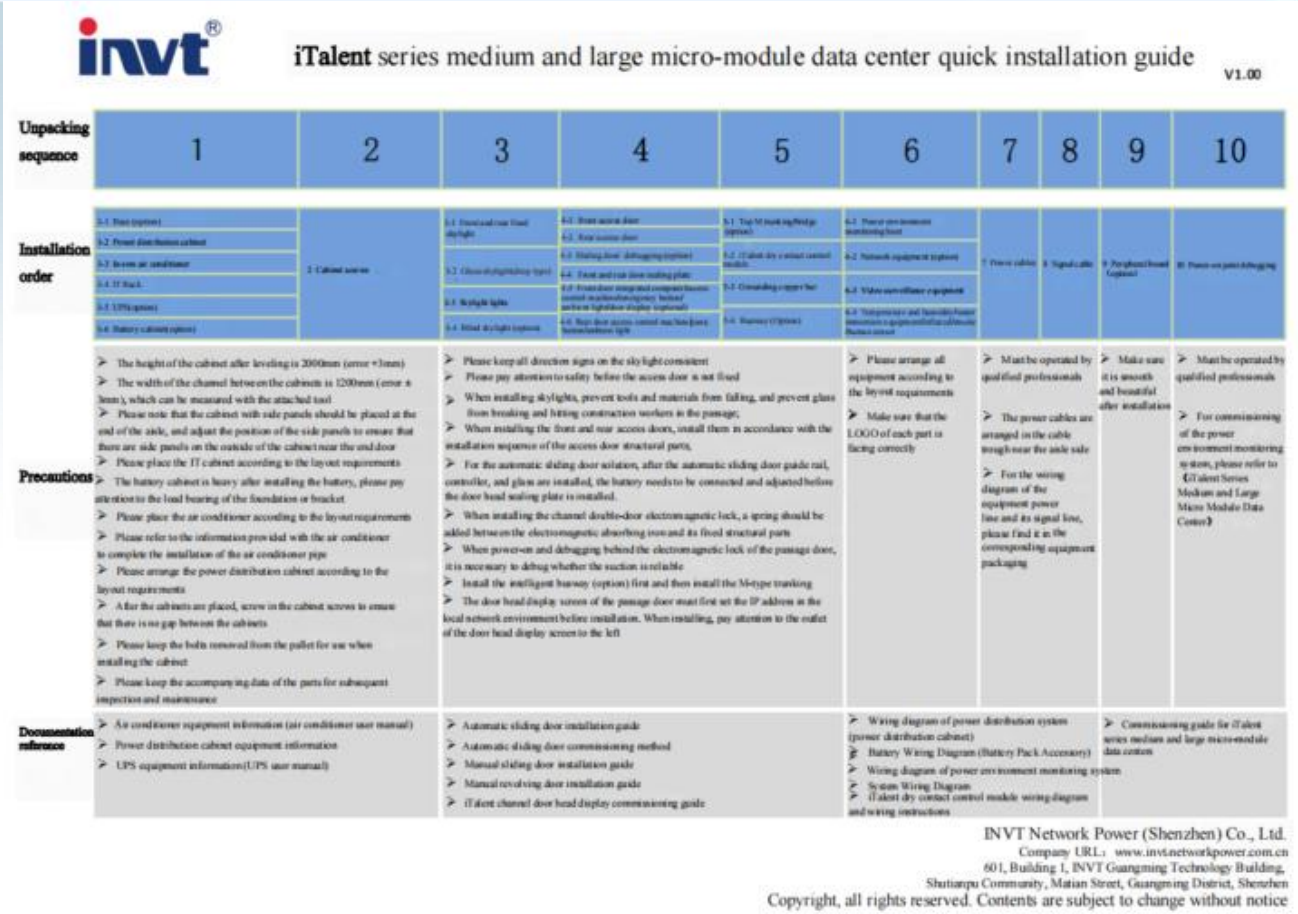
Monitor water accumulation at the bottom of the air conditioner with 2 mesh ports at the top of the sensor.Can be connected to the positioning type water leakage rope, can also be connected to the non-positioning is the water leakage rope.

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, infrared and camera (optional)

Smoke detectors, infrared intrusion detection, cameras and security exit signs are installed on top of the blind skylights in the passageway.

8、On-site installation guide



iTalent series medium and large micro-module data center quick installation guide

V1.00

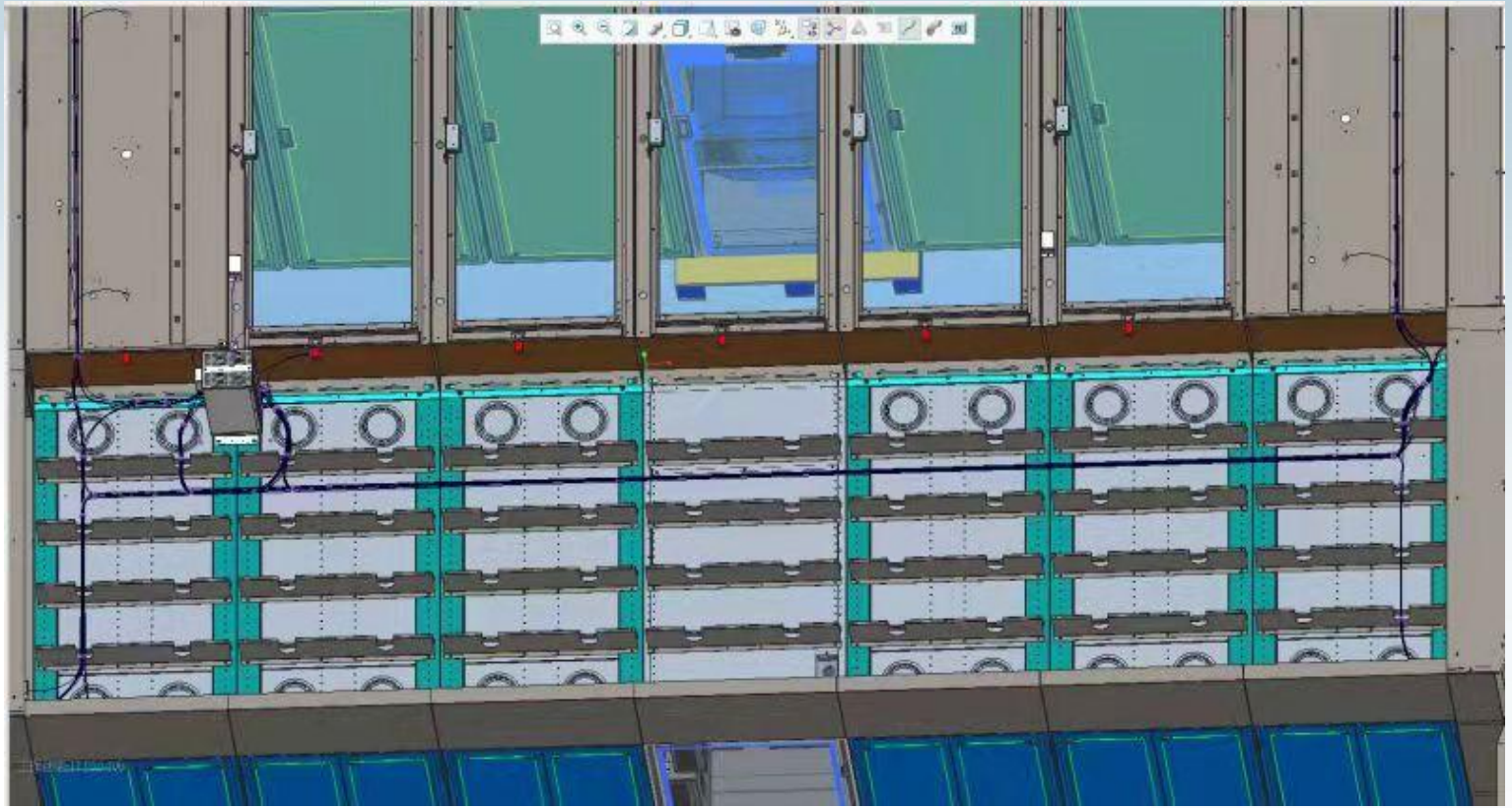
	1	2	3	4	5	6	7	8	9	10
Unpacking sequence										
Installation order										
Precautions	➢ The height of the cabinet after leveling is 2000mm (error +3mm) ➢ The width of the channel between the cabinets is 1200mm (error ± 3mm), which can be measured with the attached tool ➢ Please note that the cabinet with side panels should be placed at the end of the aisle, and adjust the position of the side panels to ensure that there are side panels on the outside of the cabinet near the end door ➢ Please place the IT cabinet according to the layout requirements ➢ The battery cabinet is heavy after installing the battery, please pay attention to the load bearing of the foundation or bracket ➢ Please place the air conditioner according to the layout requirements ➢ Please refer to the information provided with the air conditioner to complete the installation of the air conditioner pipe ➢ Please arrange the power distribution cabinet according to the layout requirements ➢ After the cabinets are placed, screw in the cabinet screws to ensure that there is no gap between the cabinets ➢ Please keep the bolts removed from the pallet for use when installing the cabinet ➢ Please keep the accompanying data of the parts for subsequent inspection and maintenance		➢ Please keep all direction signs on the skylight consistent ➢ Please pay attention to safety before the access door is not fixed ➢ When installing skylights, prevent tools and materials from falling, and prevent glass from breaking and hitting construction workers in the passage; ➢ When installing the front and rear access doors, install them in accordance with the installation sequence of the access door structural parts; ➢ For the automatic sliding door solution, after the automatic sliding door guide rail, controller, and glass are installed, the battery needs to be connected and adjusted before the door head sealing plate is installed. ➢ When installing the channel double-door electromagnetic lock, a spring should be added between the electromagnetic absorbing iron and its fixed structural parts ➢ When power-on and debugging behind the electromagnetic lock of the passage door, it is necessary to debug whether the suction is reliable ➢ Install the intelligent busway (option) first and then install the M-type trunking ➢ The door head display screen of the passage door must first set the IP address in the local network environment before installation. When installing, pay attention to the outlet of the door head display screen to the left	➢ Please arrange all equipment according to the layout requirements ➢ Make sure that the LOGO of each part is facing correctly	➢ Must be operated by qualified professionals ➢ The power cables are arranged in the cable trough near the aisle side ➢ For the wiring diagram of the equipment power line and its signal line, please find it in the corresponding equipment packaging	➢ Make sure it is smooth and beautiful after installation	➢ Must be operated by qualified professionals ➢ For commissioning of the power environment monitoring system, please refer to 《iTalent Series Medium and Large Micro Module Data Center》
Documentation reference	➢ Air conditioner equipment information (air conditioner user manual) ➢ Power distribution cabinet equipment information ➢ UPS equipment information(UPS user manual)		➢ Automatic sliding door installation guide ➢ Automatic sliding door commissioning method ➢ Manual sliding door installation guide ➢ Manual revolving door installation guide ➢ iTalent channel door head display commissioning guide			➢ Wiring diagram of power distribution system (power distribution cabinet) ➢ Battery Wiring Diagram (Battery Pack Accessory) ➢ Wiring diagram of power environment monitoring system ➢ System Wiring Diagram ➢ iTalent dry contact control module wiring diagram and wiring instructions			➢ Commissioning guide for iTalent series medium and large micro-module data centers	

INVT Network Power (Shenzhen) Co., Ltd.
Company URL: www.invt.networkpower.com.cn
601, Building 1, INVT Guangming Technology Building,
Shutianpu Community, Matian Street, Guangming District, Shenzhen

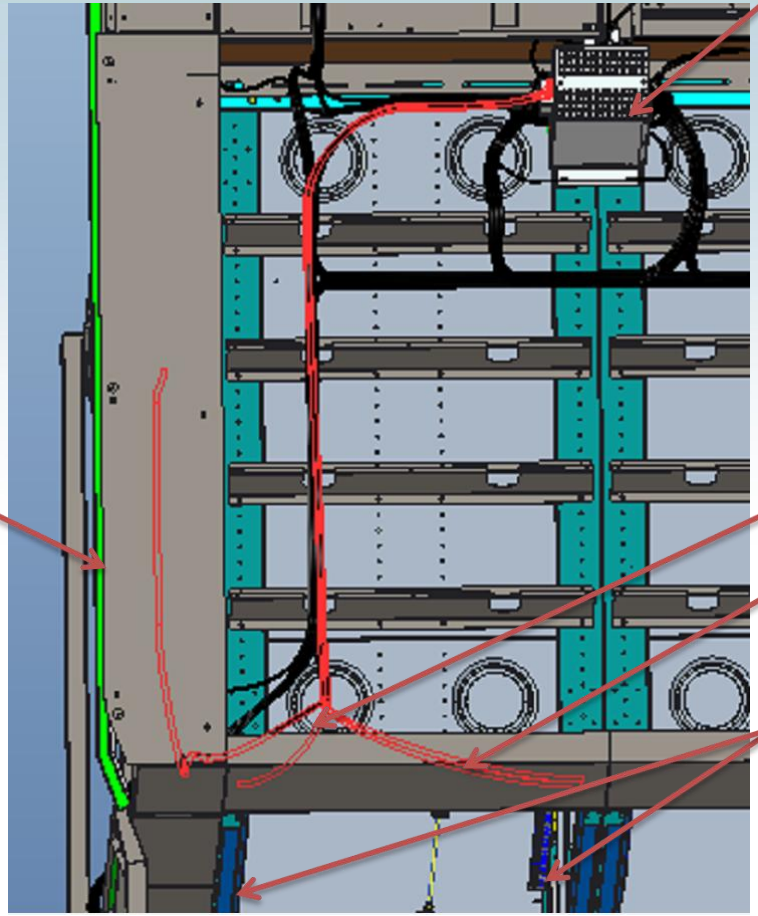
Quick Installation

Sequence numbers are posted on the packaging of the equipment sent to the site. During installation, unpack and install according to the sequence number. After all the current sequence numbers have been installed, remove the equipment with the next sequence number to avoid messy site.

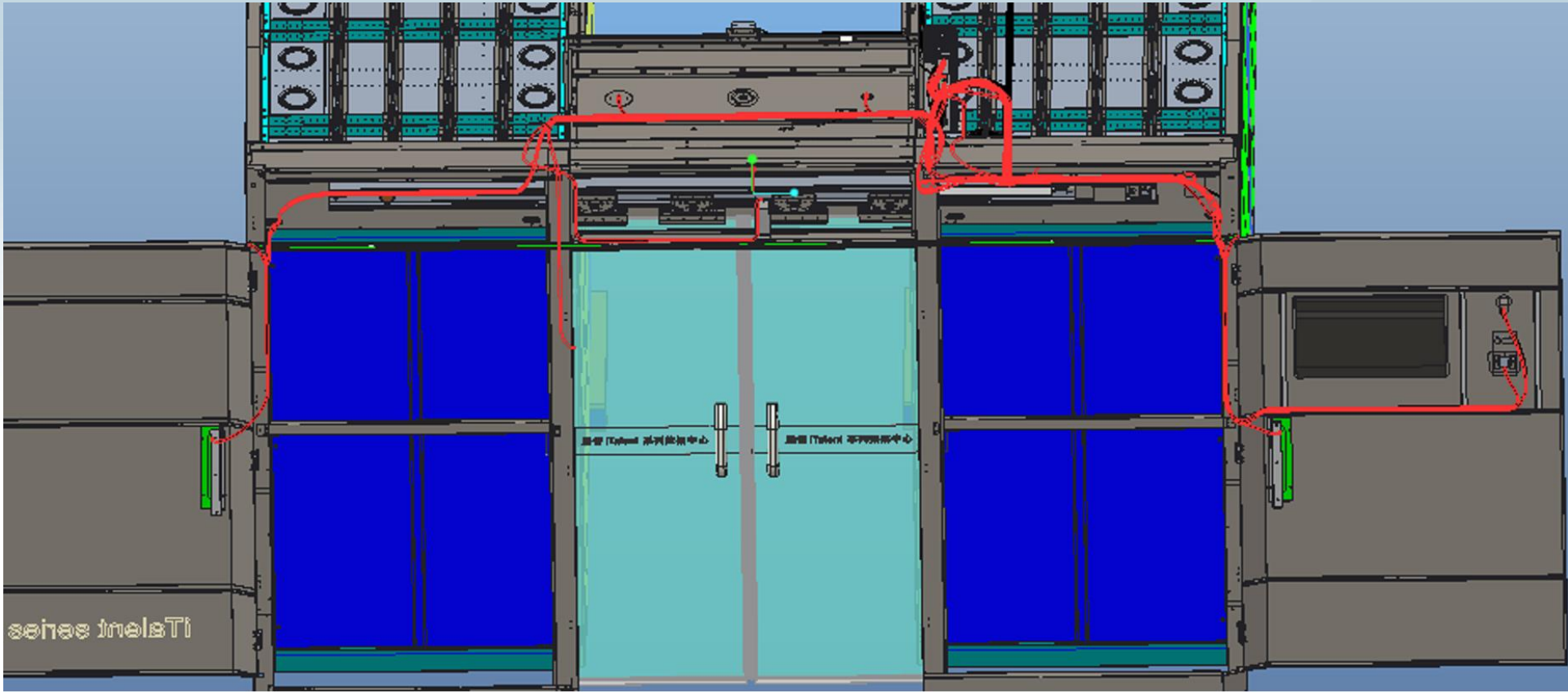
9、Extended control module signal cable



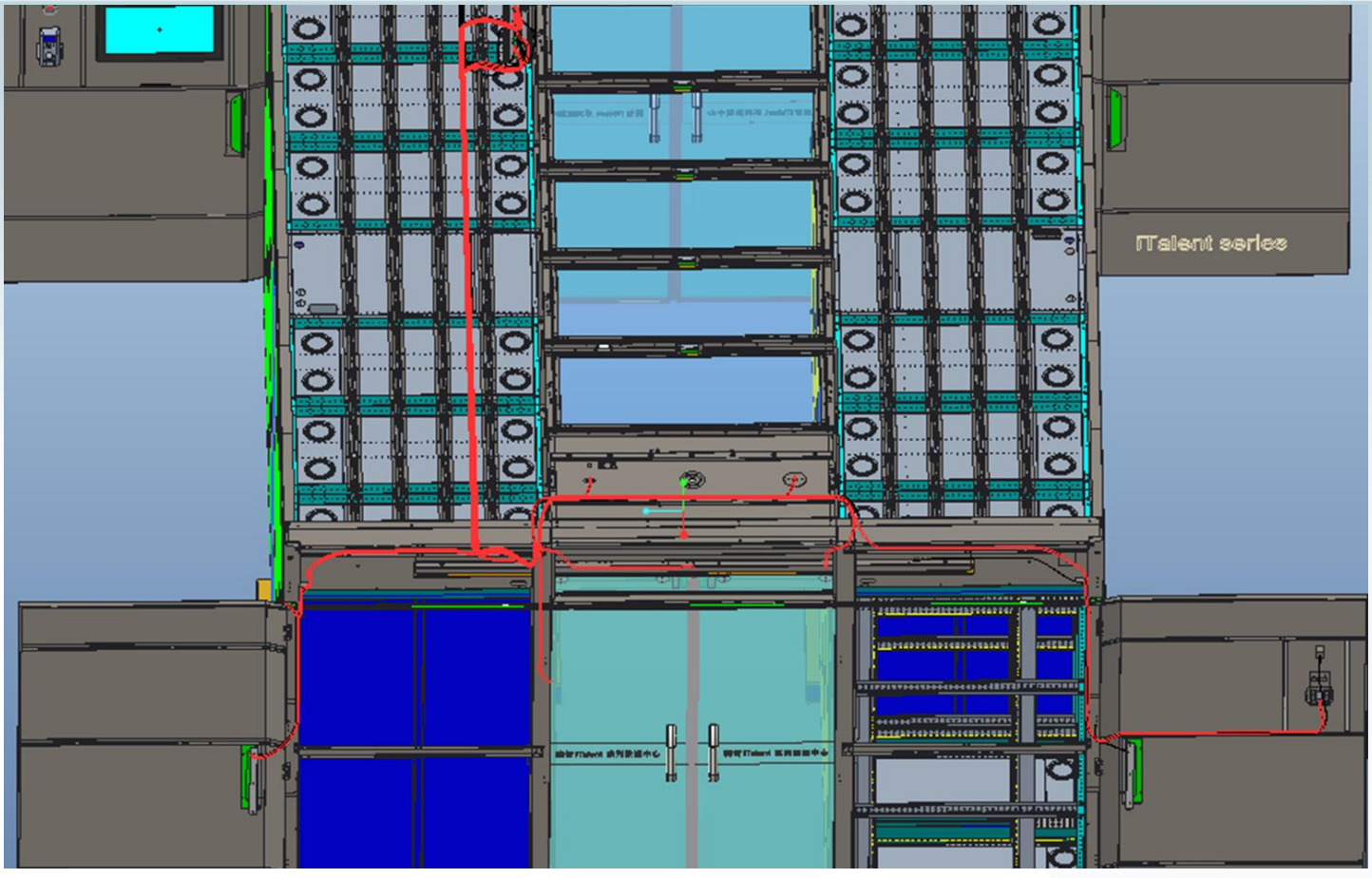
iTalent extended control module power supply



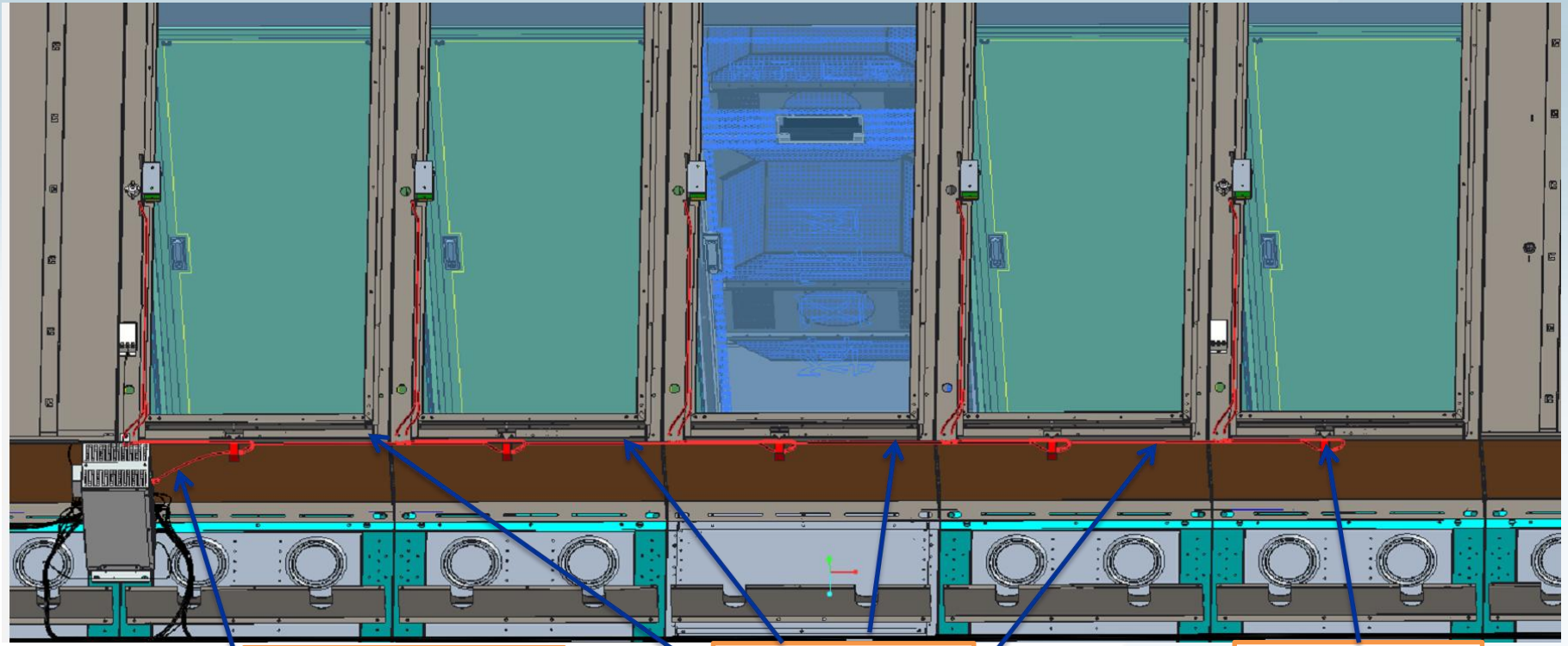
Schematic diagram of cable routing for the front access door



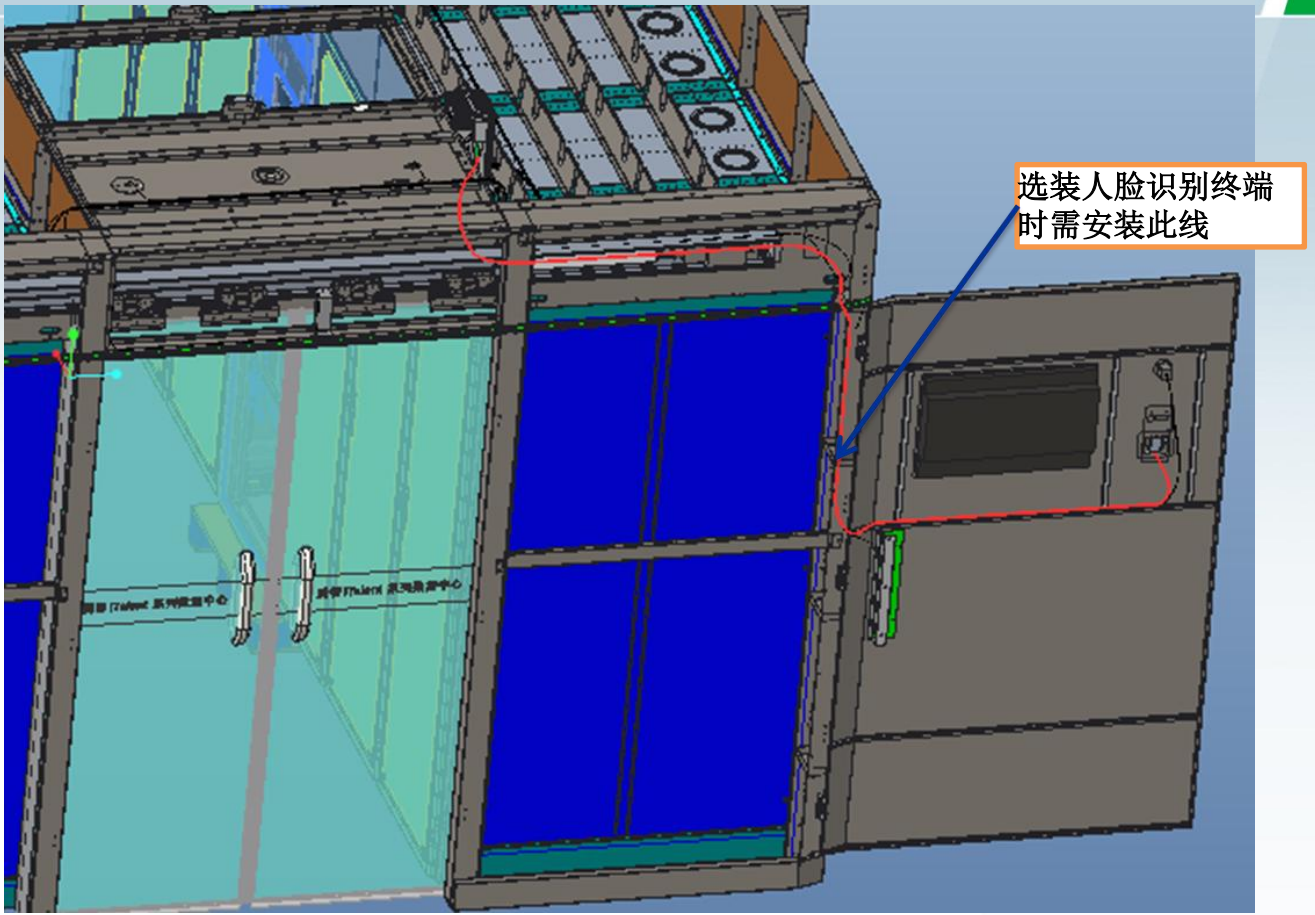
Schematic diagram of cable routing for the rear access door



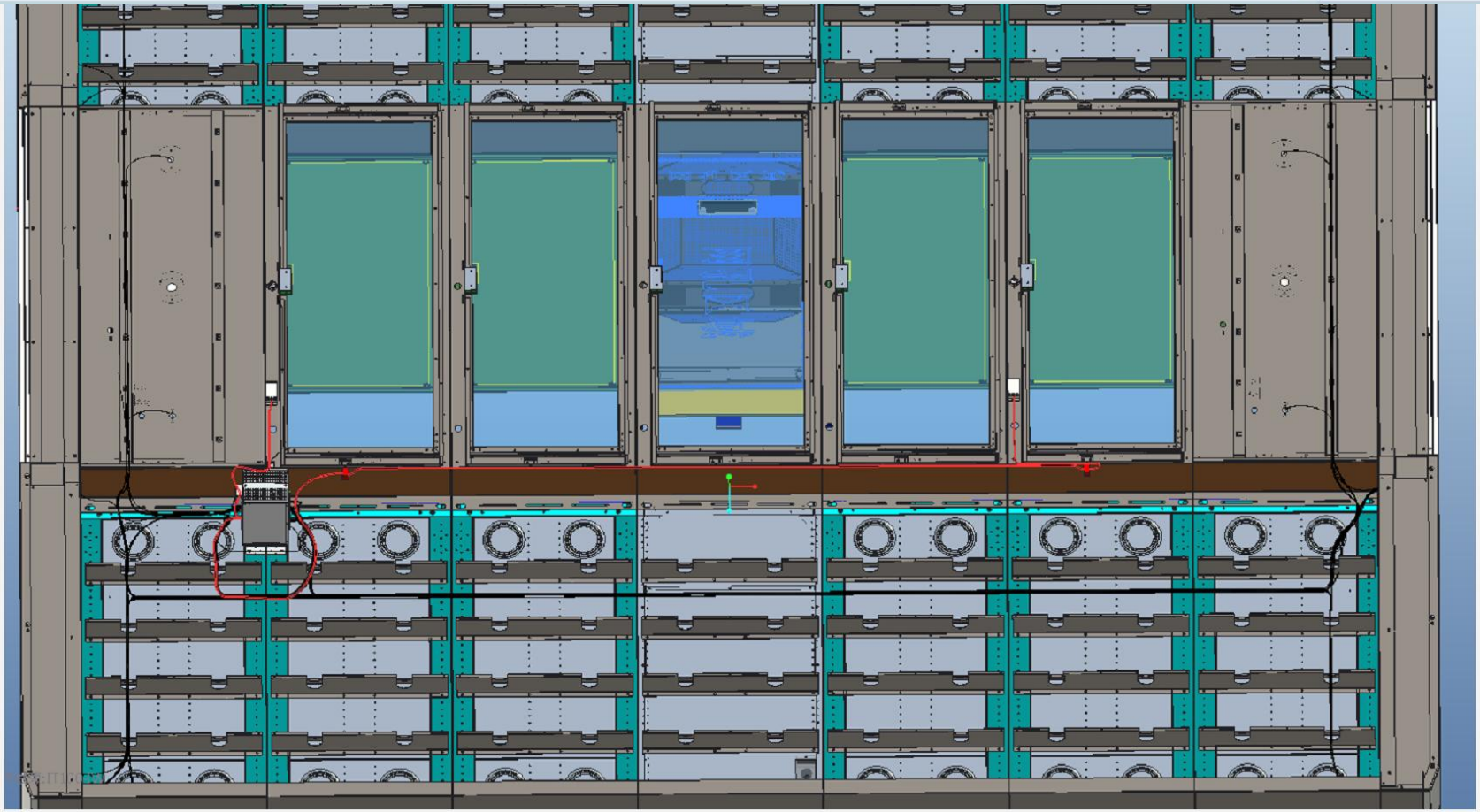
Skylight light and electromagnetic lock cable



Face recognition terminal cable



In-channel human sensor cable



21.5-inch integrated computer cable

Utility PDU
connected to cabinets

Connect to iTalent
in-cabinet network switch

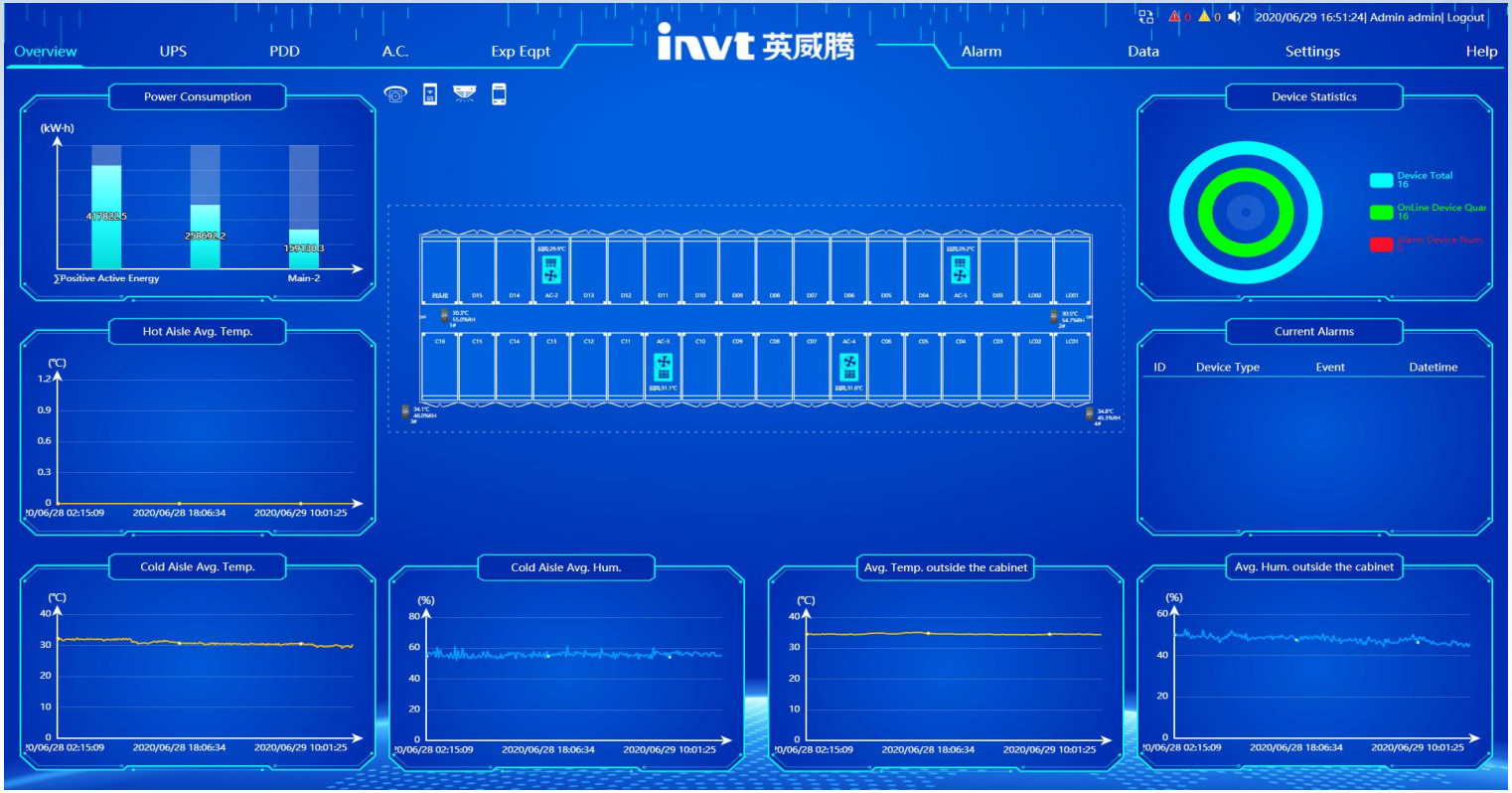
37" Strip Display Cable (optional)

Utility PDU
connected to cabinets

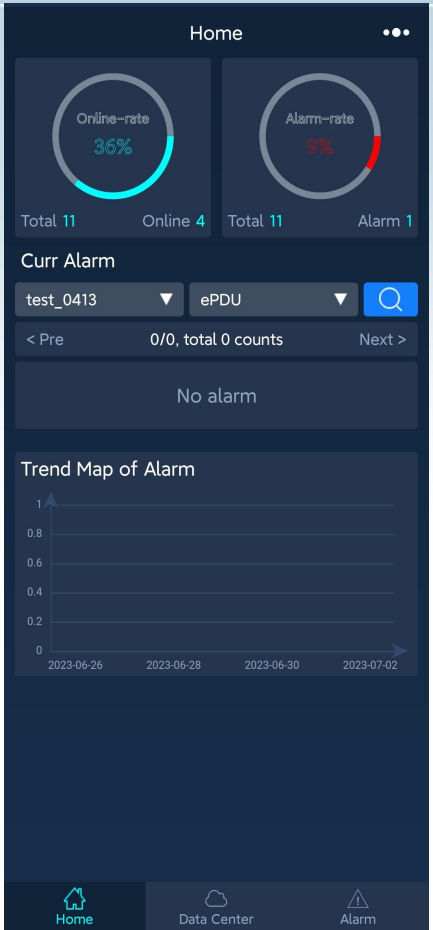
Connect to
iTalent in-cabinet
network switch

10. HMI

Local monitoring interface and WEB monitoring interface: 21.5-inch touch screen color LCD
Monitor all devices and assist in analyzing data



Mobile APP interface



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