



Digital World Products Catalogue

PROSE

Who We Are

Rosenberger Hochfrequenztechnik GmbH & Co. was founded in Germany in 1958 and ranks among the leading manufacturers of high-speed interconnect solutions worldwide. With its long tradition of excellence and innovation, Rosenberger has excelled and earned an outstanding reputation all over the world.

In early 2022 the Rosenberger Group announced the restructure of its antenna and coverage solution product portfolio with a new brand entity PROSE. The strategic focus of PROSE will be on the development of base station antennas, microwave antennas, indoor and outdoor coverage solutions, Open RAN sub-systems, data center, cabling system, IoT solutions, Automotive and related services.

As an independent entity, PROSE, with its lean, agile, and decentralized organizational structure, will be better placed to serve global customers and manage growth by bringing new technologies and solutions, aligned with the changing needs of customers in the telecom industry. The PROSE product portfolio will uphold Rosenberger's tradition of the highest innovation and quality while delivering improved technology expertise and enhanced local customer support around the globe.

PROSE consists of more than 3500 people, with 40+ subsidiaries sales/service offices, 4 factories, and 7 R&D centers covering mainly North America, Europe, the Middle East, Africa, and Asia. It will continue to serve more than 100 operators/service providers worldwide including a wide set of customized solutions for 5G deployments.

PROSE is an ISO 9001 quality system and ISO 14001 environmental system certified company. Equipped with advanced machinery, automatic assembly, and testing centers supported by a large group of more than 400 R&D engineers, state-of-the-art production assembly lines, and stringent product and quality control.

PROSE's reliability and competitiveness are the cornerstones of this sustainable growth, which have resulted in long-term partnerships with most of the leading companies in their respective industries. PROSE will continue to provide excellent product solutions and services for its customers around the world.



Suzhou, China



Pune, India



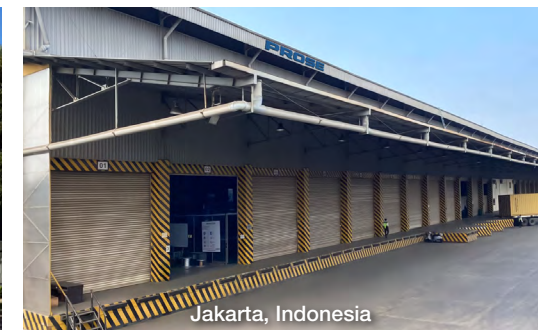
New Jersey, USA



Donauwörth, Germany



New South Wales, Australia



Jakarta, Indonesia

Mission

- Customer always comes first
- Drive innovation together with and for our customers
- Maintain a secure, humane and happy environment for our employees
- Develop our employees by investing in their education
- Take social responsibility
- Protect our environment with ecologically friendly products, production and processes

Core Value

- Value Innovation
- Customer Focus
- Sustainable Growth
- Social Responsibility



Products & Services

Digital World Products	Automatic Infrastructure Management System
	Building Cabling System
	Data Center Cabling System
	Edge Computing Data Center
	Modular Data Center
	MDC Cloud Management Platform
BTS Antennas	Single-MultiBand Antennas
	Multibeam Antennas
	Beamforming Antennas
	Small Cell Antennas
	High Efficiency BSA (PROTREETM)
	5G Massive MIMO Antennas
	Camouflage Products
Network Systems	Combiner Unit
	Master Unit
	Extended Unit
	Low Power Remote Unit (LPRU)
	High Power Remote Unit (HPRU)-Cabinet 4G
	High Power Remote Unit (HPRU)-Cabinet 5G
	High Power Remote Unit (HPRU)-Blade 4G
	High Power Remote Unit (HPRU)-Blade 5G
	Medium Power Remote Unit (MPRU)
	Passive DAS Components
Microwave Products	Class 3 Series
	Class 4 Series
	E-Band Series
	Dual-Band Series
	Microwave Components
O-RAN Radios	ORAN Radio Unit (ORU)
	Digital Control Unit (DCU)
	Small Cell
Archer Site Accessories	RF Coaxial Products
	Power Products
	Fiber Products
	Hybrid Cable Solution
	Installation Material
Filter Solutions	Interference Mitigation Filters
	Embedded Filters
	Site Combiners

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PROSE Digital World



PROSE Digital World Business Unit is a professional provider of basic networks and facilities, with a long-term commitment to providing customers with the following solutions and products:

PROSE Data Center Infrastructure Product Series.

Including Micro Data Center (MDC), Modular Data Center (MODC), Outdoor Data Center (ODC), Container Data Center (CDC), Data Center Infrastructure Management (DCIM), Cloud management platform, etc.

PROSE Structured Cabling System.

Including premises and data center cabling system products. Such as: copper cable, fiber cable, patch panel, network module, patch cord, faceplate, plug, network and server cabinet, wall-mounted cabinet, etc.

PROSE Intelligent Network Infrastructure Management System.

Including master unit, extension unit, copper scanner unit, fiber scanner unit, copper patch cord, fiber patch cord, monitoring & management software, etc.

Our products are self-developed and self-designed. Compared with the products on the market, it has its own unique advantages:

- High Performance and Reliability**
Provide customer with a secure and effective network operating environment.
- Energy Efficiency**
Low PUE which can save energy consumption and reduce operating cost.
- Modular Design, Fast Installation**
All solution and products are modular designed, easy to install and maintain.
- Intelligent Management**
Self-developed software system can achieve remotely monitoring and management, real-time statistic report and alarm push.
- Easy to Upgrade**
Our solutions are designed with the need for later upgrades and expansions, enabling seamless onsite upgrades in both software and hardware.

PROSE Digital World product line not only has a strong software and hardware R&D team, but also has the ability to quickly respond to engineering services. In addition, we can also provide a complete set of customized basic network solutions for customers.

PROSE KHIPU Data Center

KHIPU

From Germany and adhering to German quality, committed to providing customers with professional data center infrastructure solutions.

Data centers are pivotal hubs for digital information, serving as the backbone of internet infrastructure. They facilitate the seamless transmission, processing, and storage of vast amounts of data. Designed for resilience, these centers ensure continuous operation with advanced cooling systems, redundant power supplies, and robust security measures. With an emphasis on energy efficiency, they often employ low-voltage DC power for most electronic components, reducing energy consumption and enhancing sustainability. Data centers are essential for global connectivity, supporting a wide array of services from cloud computing to data analytics.

PROSE Digital World launched micro data center, modular data center, outdoor data center, container data center, shielding cabinet and other products to provide important support for informatization and digital transformation in various industries. PROSE also independently developed equipment monitoring software, cloud management platform, mobile APP management and other functions to improve intelligent equipment management.



Micro data center



Electromagnetic shield cabinet



Outdoor data center



Modular data center



Container data center

Certification



Features



Energy

- AC Energy Saving 30%
- PUE Less Than 1.26



Environment

- Saving Room Space 40%
- Quiet Operation Less-than 58dB
- Joint Available for Rack



Smart

- DCIM 24H Cloud O&M
- Local and Remote Alarm



Safety

- System Emergency Response Protection
- Biometrics Authentication



Cost

- Lower Investment by 25%
- Fast Installation

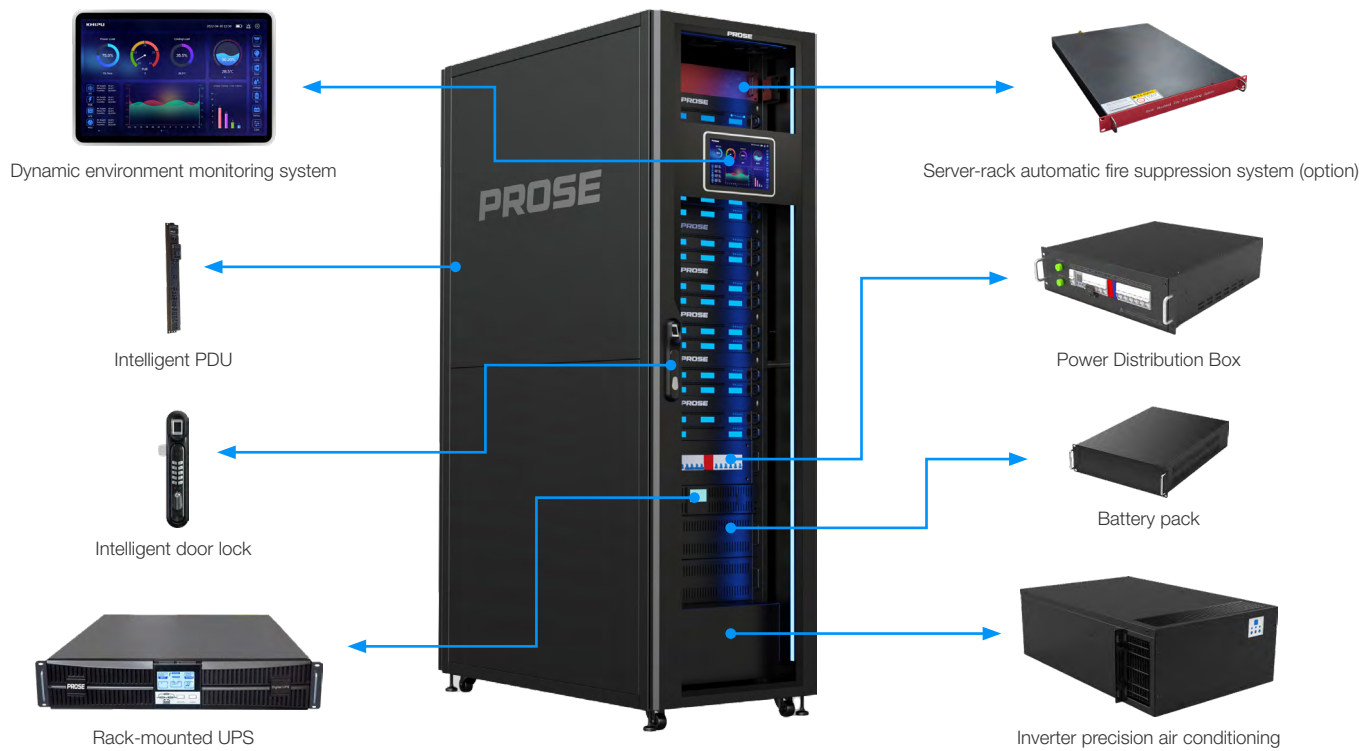
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Micro Data Center (MDC)

Micro Data Centers (MDC) are at the forefront of the evolving IT landscape, offering a compact, efficient solution for data management. Designed for rapid deployment, MDC are ideal for edge computing, bringing processing power closer to data sources and reducing latency. They boast a modular design, allowing for scalability and flexibility in diverse environments, from urban spaces to remote locations. MDC ensure high levels of security and reliability, integrating advanced cooling and power systems. Their energy-efficient operation aligns with sustainability goals, making them a smart choice for businesses adapting to the digital era's demands. This synergy of size, efficiency, and adaptability positions MDC as a vital component in modern data infrastructure.

Application Scenarios

Weak current room, monitoring room and small data room in government, finance, industry, communication, transportation, power energy, medical care, education, Internet, and other industries. The room area is no more than 40 square meters.



Micro Data Center (MDC)

Item	Micro Data Center	
Height unit (customizable)	27U	42U
Cabinet size W*D*H(mm)	600(800) x 800(1200)x 1350	600(800) x 800(1200) x 2050
Number of cabinets	1	1-10
UPS capacity(kVA)	3/6	3/6/10/15/20/25/30/40
IT load(KW)	2.7/5.4	2.7/5.4/10/15/20/25/30/40
UPS input voltage	≤6kVA: AC220V	≤10kVA: AC220V; >10kVA: AC380V
UPS space	≤6kVA: 2U	≤10kVA:2U; 15~25kVA:3U; 30~40kVA:4U
Battery Voltage	DC96V/DC192V~DC240V	DC96V/DC192V~DC240V / DC384V~DC480V
Battery Backup	On-demand selection	On-demand selection
PDB Input Voltage	≤6kVA: AC220V	≤10kVA: AC220V; >10kVA: AC380V
PDB Input Current	≤6kVA: 40A~50A	≤10kVA: 40~80A; >10kVA: 50A~125A
Refrigerating capacity of Air conditioner (KW)	3.5	3.5/6.5/12.5
Diesel generator power port	On-demand selection	On-demand selection
Channel closure type	Fully enclosed hot and cold aisles	Fully enclosed hot and cold aisles
Power environmental management system	It can monitor temperature and humidity, smoke, water leakage, power distribution, UPS battery, air conditioning and other equipment, and has a key unlock, PUE display function; The alarm mode can be email, SMS, or mobile APP.	
PDU	Standard PDU or smart PDU can be selected	
Fire suppression system	Option, Configure one cabinet for each cabinet	
Refrigerant	R410A	
Color	Black or Gray	
Structure composition	Welding framework, cabinet seal design as a whole	
Meet standard	ANSI/EIA RS-310-D, IEC297-2, DIN41491, DIN41494, GB/T3047.2-92	
IP level	IP5X	
Display panel	10.1" Touch Panel LCD	
Display languages	English / Chinese	
LED lighting	BI-Color (Red & Blue)	
Front door	Toughened glass door with mechanical lock or smart lock	
Unlocking function	Fingerprint /IC card/keyboard/key	
Rear door	Enclosed steel door, The rear door automatically opens when the temperature is too high.	
Static load	Up to 2200kg	
Safety standard	RoHS	



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Modular Data Center (MODC)

Modular Data Center (MODC) is to integrate the power distribution system, cooling system, dynamic environment monitoring system, fire suppression system, security system and cooling channel system into an intelligent platform, which further improves the safety, reliability, and health of equipment, and is greener and energy-saving.

Modular infrastructure can meet the requirements of customers' special needs and usage, meet the requirements of prefabricated production of all modular internal infrastructure and equipment, assemble, and deliver on site quickly, and truly realize the one-stop solution of rapid deployment of IT equipment. It has the characteristics of modular integration, safety, and reliability, saving room floor space and energy, saving time, labor and worry in installation, compatible architecture, quick and flexible deployment, intelligent monitoring, efficient and stable cooling, etc. It is a new generation of intelligent module data center products.

Application Scenarios

It is mainly used in small and medium data center scenarios. Its simple design, strong architectural adaptability, and low requirements for computer room floor height and renovation meet the data center deployment requirements of corporate headquarters or large branches, bank headquarters and secondary branches, government, operators, education, medical care, energy, and other industries.



Modular Data Center (MODC)

Item	Module Data Center
Specification	Standard: Width:3600mm; Height 2000mm/2200mm; Length:15000mm; Support other customization requirements
Number of IT cabinets	Maximum support 48 cabinets
Average power of single cabinet	Standard 3-5 kW, supporting other customization requirements
Recommended installation method	Steel structure base or epoxy floor
Power supply support architecture	Two-way UPS, two-way commercial power, one-way commercial power and one-way UPS; Support other customization requirements.
Flip skylight	Automatic turnover of glass skylight, supporting fire linkage control.
Intelligent	Energy-saving LED lighting, supporting human body induction
Intelligent atmosphere lamp	Intelligent atmosphere light, supporting alarm linkage color change.
Cabinet Size (W*D*H)	600/800*1200*2000/2200mm
Cabinet load bearing	1000kg/1500kg/2000kg
Enter UPS and battery system.	
UPS rated capacity	The maximum integrated UPS power distribution is 150kVA; Independent UPS can reach more than 200kVA; Single module 20kVA/25kVA/40kVA/50kVA; Adopt standard cabinet body.
Frequency range	40--70Hz
Input voltage range	300--460VAC
Output voltage	380/400/415VAC, 50--60Hz, 3Ph+N+PE
Input power factor	≥0.99
Output power factor	1
Battery cupboard	Adopt cabinet battery cabinet with heat dissipation module.
Backup time	Configure 15min, 30min or other customization according to the actual load.
Number of batteries	A total of 16-40 12V lead-acid batteries can be installed in the battery cabinet unit.
Battery monitoring	Configure according to the actual UPS, and support to monitor the internal resistance, voltage and temperature of each battery.
Into the precision column head cabinet	
Input voltage range	360-415VAC
Distribution output	The maximum support of input switch is 630A;
Input mode	1/2-way MCCB; PC/CB ATS
Output mode	IT load power supply, air conditioning load power supply, other power load power supply, etc.
Examine	Support measuring voltage, current, open state, real power, active power and electric energy;
Report an emergency	Support main circuit overvoltage and undervoltage alarm, overcurrent alarm, frequency abnormality alarm, single-circuit power-off alarm, three-phase unbalance alarm, etc.
Interrow air conditioning	
System cooling capacity	25KW/40KW
Sensible heat ratio	0.99
Internal dimensions (W*D*H)	300*1200*2000mm (25KW), 600*1200*2000mm (40KW)
Refrigerant	R410A
Monitoring unit	
Man-machine interface	10.1/13.3/15.6/19/21-inch touch screen
Monitoring category	Temperature and humidity, smoke, temperature, camera, sound and light alarm, SMS alarm, water leakage monitoring, etc.
Monitoring collection	The system includes integrated monitoring panel/standard 1U rack monitoring host, supporting UPS, air conditioning, battery, and distribution cabinet monitoring; Support temperature, humidity, smoke, input/output switch value and other environmental monitoring; Supports dual network ports and data export; Supports SD card/hard disk expansion, network monitoring through northbound interfaces, access control system, video system monitoring, and dual power supply expansion.

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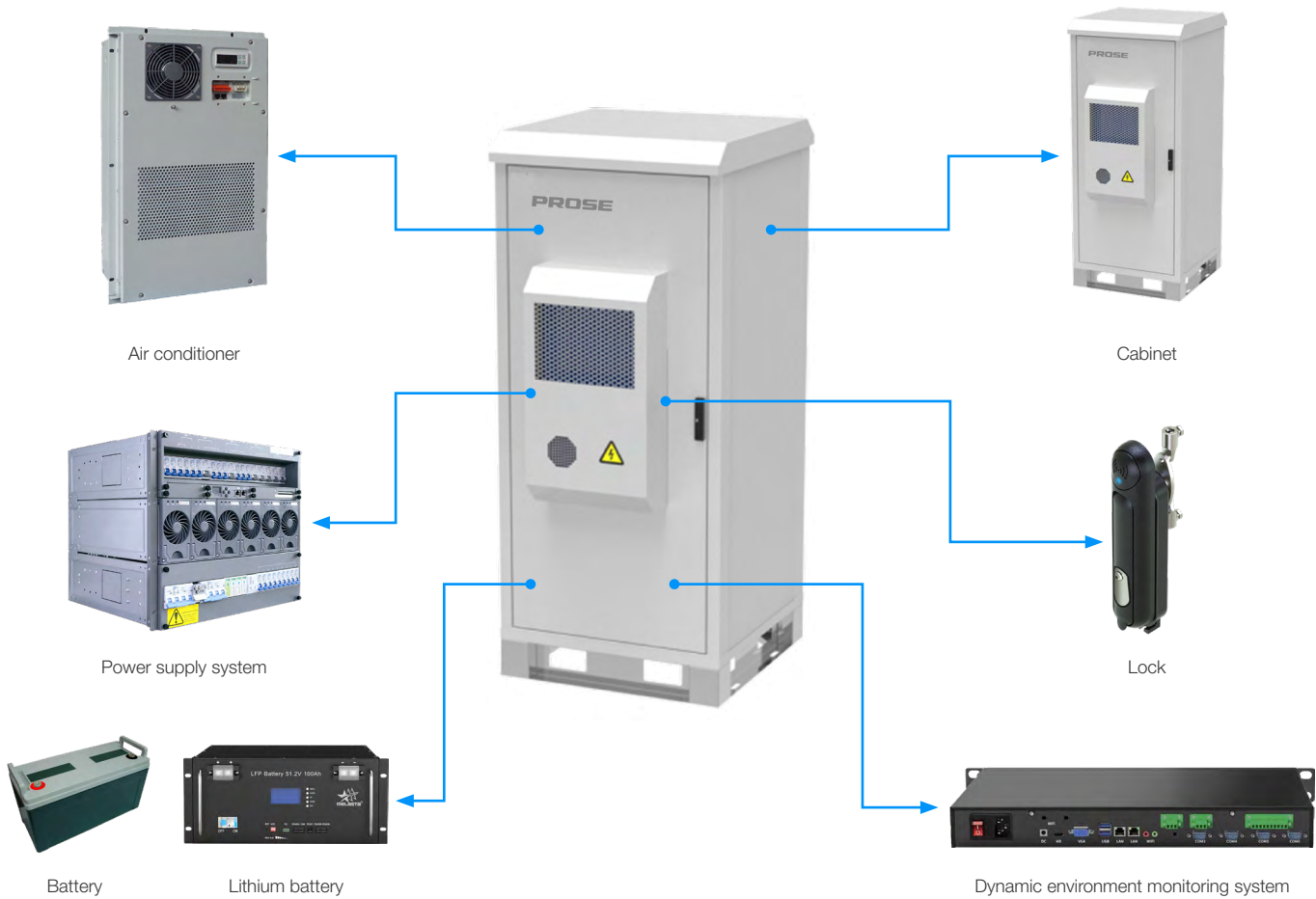
Outdoor Data Center (ODC)

Outdoor Data Center (ODC) provide modern sites with miniaturized, high-integration mini data centers, boasting a series of irreplaceable advantages over traditional machine rooms, extensively used in communication infrastructure. These cabinets can be customized flexibly to meet diverse usage requirements, ensuring full adaptability for installation and operation in various environments. The temperature control system offers options such as air conditioners, heat exchangers, combined air conditioning and heating units, and fans to meet specific thermal management needs.

Base station outdoor cabinets are designed to provide solutions for various communication base stations, including macro and distributed stations, ensuring normal installation and usage under diverse environmental conditions. The main types include: aluminum profile assembly outdoor cabinets, sheet metal welding outdoor cabinets, and sheet metal assembly outdoor cabinets.

Application Scenarios

Mountaintops, plazas, rooftops, railway sides, highways, and other remote areas that require wireless coverage.



Outdoor Data Center (ODC)

Item	Outdoor MDC
Height Unit (customizable)	37U
Cabinet size W*D*H(mm)	900 x 900 x 2100
Static Load	Up to 2000kg
Color	RAL7035
Structure Composition	Welding framework / Color steel sandwich board, cabinet seal design as a whole.
LED lighting	The indicator status is linked to the door panel status.
Front door	Toughened glass door with mechanical lock or smart lock.
Rear door	None
Safety standard	RoHS
IP Level	IP55
Air Conditioner Capacity	1.5kW
Air Conditioner Input Power	600w
Power System Size	482*350*5U
Power System Capacity	DC-48V 200A
Single Module Capacity	DC-48V 50A
Number of fully configured modules	1~4 Pcs
Battery Capacity	DC51.2 100Ah / DC51.2 200Ah
Battery Backup	On-demand selection
Monitoring collection	Standard 1U rack monitoring host, support temperature, humidity, smoke, input/output switch value and other environmental monitoring; Northbound network monitoring

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Container Data Center (CDC)

Container Data Center (CDC) designed by PROSE includes several functional units such as container box and seal assembly system, power supply and distribution system, IT cabinet system, refrigeration system, monitoring system, and fire protection system. After the container is preinstalled and pre-commissioned in the factory, it is transported to the destination. After the container is installed, the user can deploy the server by himself.

The use of container structure, not only the installation is simple and fast, to ensure that the user's business quickly online, but also to avoid building construction and other problems; The design of the container itself fully meets the outdoor operation conditions, not only with rain prevention, sunscreen, salt spray and other protective measures, to meet the national standard IP55 fire rating, but also fully adopted fire prevention and anti-theft measures.

Application Scenarios

- Emergency response: Container data centers can be quickly deployed in emergency areas to provide temporary data processing and storage capabilities for disaster relief, emergency rescue and recovery work. They can be deployed to disaster areas at short notice and provide temporary computing, communications, and data support.
- Edge computing: Container data centers can be deployed in edge computing environments to process and store data close to where the data is generated. This is useful for iot devices, sensor networks, and edge application scenarios, providing low-latency data processing and fast decision-making capabilities.
- Temporary projects or events: The crated data center can be used to support temporary projects or events, such as outdoor exhibitions, sporting events, music festivals, etc. They can provide temporary computing resources, network connectivity, and data storage for these activities to meet temporary, high-density data needs.
- Remote areas and field applications: In remote areas or field environments, traditional stationary data centers are difficult and expensive to build. The container data center can be used as a mobile solution to provide computing and data support in remote areas, such as mining, oil fields, research bases, etc.
- Temporary capacity expansion and capacity management: Container data centers can be used as temporary capacity expansion solutions. When the capacity of traditional data centers is insufficient, container data centers can be deployed to rapidly increase computing and storage capabilities. They can also be used for capacity management, allowing some workloads to be moved to containerized data centers when maintenance, upgrades, or expansions are required.



Container Data Center (CDC)

Type	Parameter Specification
Container System Size(W*D*H)	3000mm*13716mm*3200mm (40 feet)
IP Level	IP55
IT Cabinet Size(W*D*H)	600mm x 1200mm x 2200mm(47U)
IT Cabinet QTY	13 set
PDU	Standard PDU, vertically installed, 32A input, 20 x 10A+4 x 16A output
Integrated UPS	
Dimensions (W*D*H) (mm)	600×1200×2000
Rated voltage	380V
Frequency range	40~70 Hz
Battery voltage	±192V
Display screen	7 in
UPS power	120kVA
Mains output power distribution module	The air conditioner power supply is 40A/3P MCB*5, the IT cabinet PDU power supply is 50A/1P MCB*10, and the maintenance socket is 16A/1P+NA RCD*1
UPS output power distribution module	The PDU power supply of the IT cabinet is 50A/1P MCB*10, and the other branches (such as fire control, lighting, and new fans) are 10A/1P MCB*7
Lithium Battery Cabinet	
Nominal capacity (kWh)	31.68 (11 battery modules)
Cell discharge ratio	4C
Rated output power (discharge) (kW)	110
Communication mode	TCP/IP, RS485
System display mode	Touch screen
PAC Cabinet	
Air Conditioner Capacity	25kW
Air Conditioner Size (W*D*H) (mm)	300×1200×2000
Machine air volume (m³/h)	5000
Energy efficiency ratio (EER)	3.1
Air Conditioner QTY	5
Fire Protection System	Fire alarm/linkage control/gas fire extinguishing controller, emergency stop button, manual/automatic transfer switch, fire sound and light alarm, bleed indicator light, emergency light, escape channel indicator light, safety exit indicator light, smoke detector, temperature detector, solenoid valve, pressure switch, fire sprinkler, fire gas cylinder and fire extinguishing agent (HFC-propane), etc
Dynamic loop monitoring system	Monitoring all-in-one, switch, 10-inch LCD touch screen, multi-loop precision power distribution monitoring system, battery monitoring system, UPS monitoring system, air conditioning monitoring system, environmental monitoring system (temperature and humidity detection, water leakage detection, hydrogen concentration detection), fire monitoring system (smoke detector, temperature detector), access control system (access controller, access card reader, IC Induction card, magnetic lock, exit button, emergency door button, etc.), video surveillance system (including 3pcs gun camera, 4pcs hemispherical camera, NVR hard disk burner, etc.), sound and light alarm device, etc
Cable bridge	The cable tray is divided into strong current cable tray, weak current cable tray and optical fiber trough. The bridge is supported by the top bracket of the equipment. The weak current cable tray is mainly used for the weak current and signal cable routing of fire fighting and monitoring equipment.
Anti-static floor	Install ESD floors in the cold and hot aisles of containers. Place the ESD floor directly on the welded square pipe at the bottom of the container. The gap between the ESD floor and the sides of the container and cabinet is sealed with L-shaped or T-shaped aluminum alloy. The ESD floor is 200mm high, and the bottom is used for air conditioner pipe routing.
System electromagnetic shielding	The whole container adopts the way of strong current and weak current separate wiring to avoid strong current interference to the weak current part; After external cables are connected, the internal physical isolation mode is used to effectively isolate strong and weak electricity.

KHIPU

Electromagnetic Shielded Cabinet

Electromagnetic Shielded Cabinet is suitable for placing computers and testing wireless communication equipment. They protect against electromagnetic waves harming the human body, effectively prevent electromagnetic information leakage from computers, and shield against strong external electromagnetic interference that can disrupt computer operations, or provide a clean wireless testing environment for communication devices.

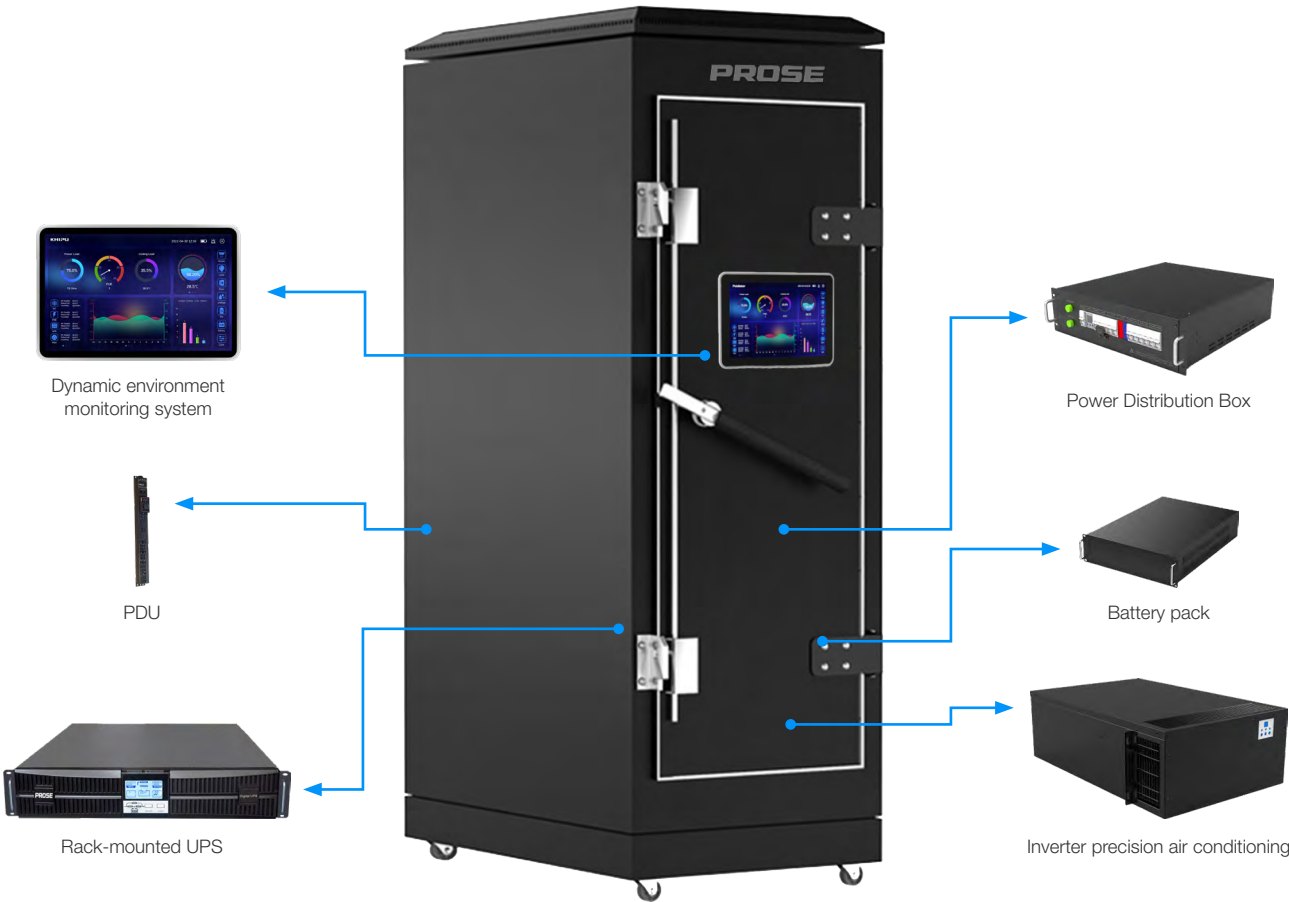
Electromagnetic Shielded Cabinet offers excellent universality and strong compatibility, ideal for electromagnetic protection of network devices such as networks, communications, large data center servers, switches, and routers. The product size and internal structure can be customized according to user needs. The working principle of the shielded cabinet is as follows: When electromagnetic waves hit a metal plate with air on both sides, some energy is reflected, known as reflection loss. The part of the wave that attenuates while propagating through the metal plate is called absorption loss. This process of reflection from the second interface back to the first continues until all energy is lost in transmission.

Application Scenarios

Electromagnetic shielded cabinets are mainly used for electromagnetic information security protection of computer, network server, switch and other network information equipment.

A higher level of confidentiality: prevent confidential electromagnetic information from leaking into outer space; Prevent malicious interference and External electromagnetic wave attack.

It can also be applied to the wireless performance test of wireless communication equipment or terminal products to provide a clean and reliable test environment for testing.



Electromagnetic Shielded Cabinet

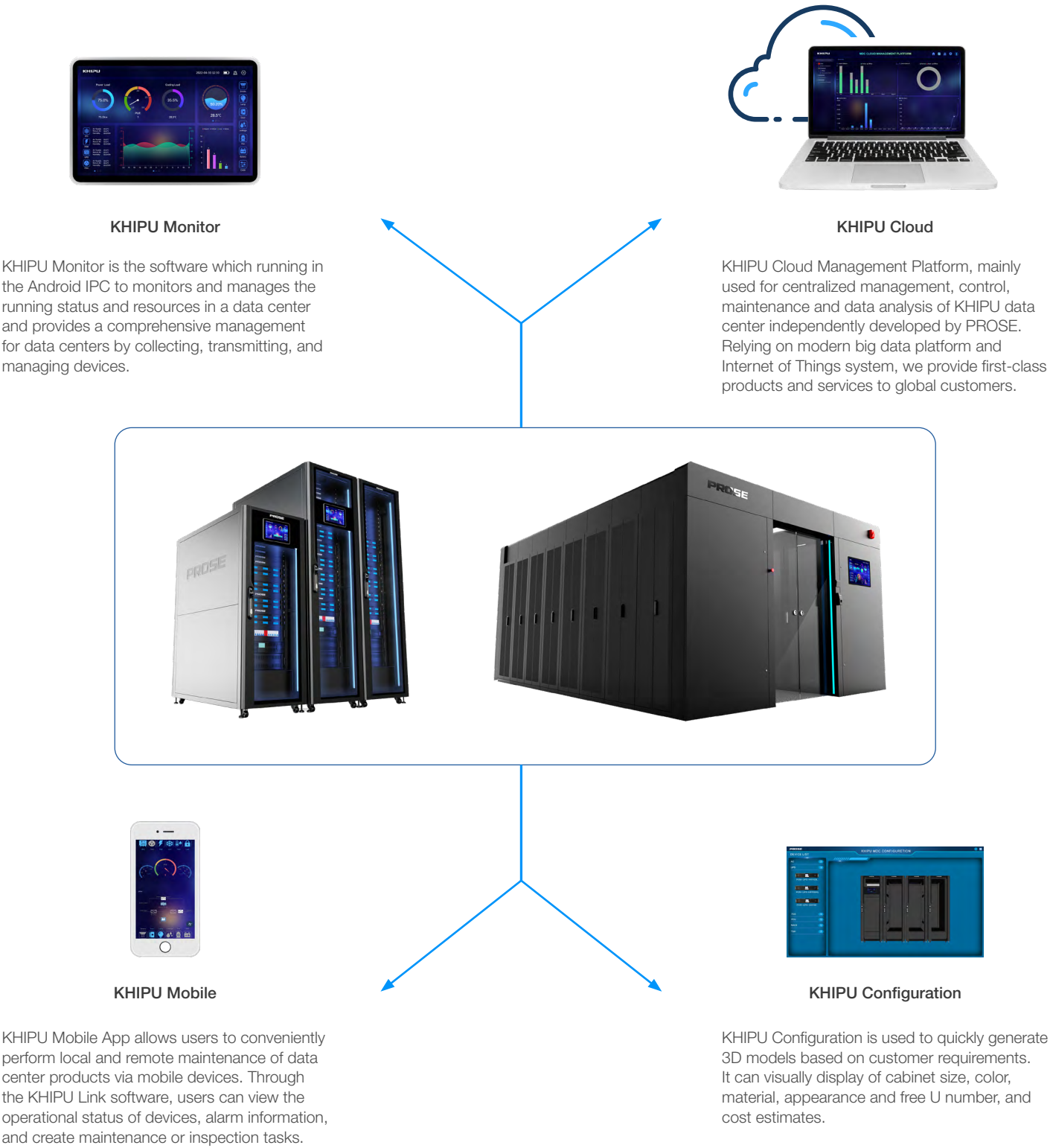
Item	Technical Parameters	
Height unit (customizable)	37U	27U
Cabinet size W*D*H (mm)	700 x 980x 2000	700 x 980x 1200
Weight	About 350kg	About 260kg
Shielding Function	Class C	
Electromagnetism	14KHz≥70dB 150KHz≥95dB	
Electric Field	200KHz-50MHz≥100dB	
Plane Wave	50MHz-1GHz≥100dB	
Micro-Wave	1GHz-10GHz≥95dB	
Applicable Environment	-20°C-+60°C	
Relative Humidity	>85%	
Cable Waveguide	10 pcs	
Optical Fiber Waveguide	5 pcs	
Filter	16A, 1 pcs	
Fan	8 pcs	
Waveguide Window	300*300mm	
Power	AC220V 16A	
Static load	Up to 2000kg	
Color	Black	
Structure composition	Welding framework, cabinet seal design as a whole	
IP level	IP5X	
LED lighting	The indicator status is linked to the door panel status.	
Front door	Toughened glass door with mechanical lock or smart lock	
Rear door	None	
Safety standard	RoHS	

KHIPU

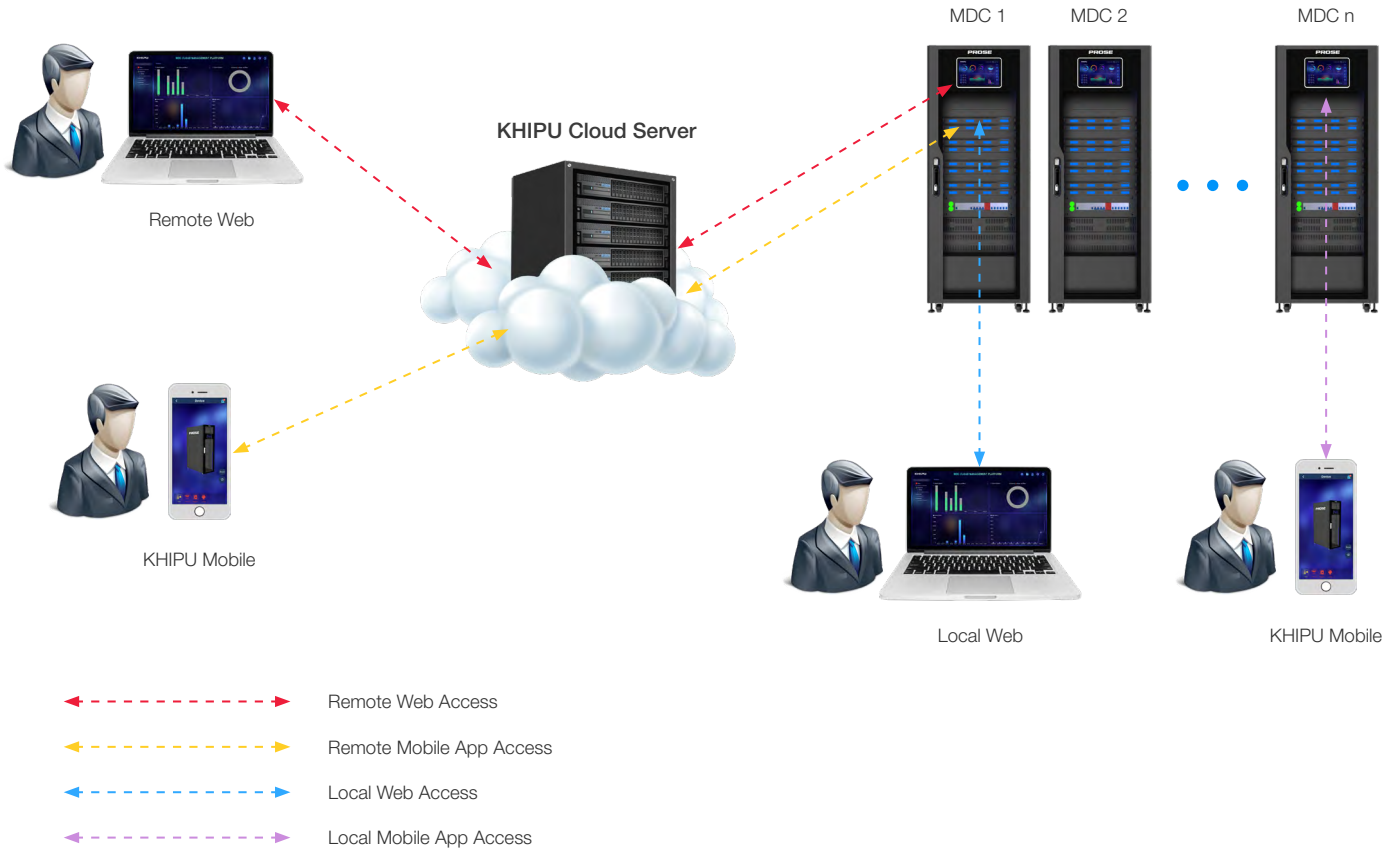
KHIPU Software Family

PROSE has its own strong software team, which can do customized function development for customers, and flexibly achieve compatibility and unification with customer software.

PROSE provideds four sets of software for KHIPU data center: KHIPU Monitor, KHIPU Cloud, KHIPU Mobile and KHIPU Configuration. These softwares provide customers with a better experience in product selection, system monitoring and management.



System Architecture



- There are 4 ways for customer to monitor and manage the MDC system.
- Local Web Access: Customer can use the LAN to log in the MDC server by Web to monitor and manage the MDC locally, no need Internet.
 - Local Mobile App Access: Customer can use the LAN to log in the MDC server by Mobile App to monitor and manage the MDC locally, no need Internet.
 - Remote Web Access: Customer login the MDC server via Internet and KHIPU Cloud Server to monitor and manage the MDC by Web.
 - Remote Mobile App Access: Customer login the MDC server via Internet and KHIPU Cloud Server to monitor and manage the MDC by Mobile APP.

Data Center Dynamic Environment Monitoring System

KHIPU Monitor System monitors and manages the running status of assets and resources in a data center and provides a comprehensive management platform for data centers by collecting, transmitting, and managing devices. IT serves as a bridge between the equipment room infrastructure and IT devices. IT helps O&M personnel manage data centers and improves the reliability of the equipment room and the security of communication devices. In ordinary demand, if only do power, environmental equipment monitoring, we generally call it KHIPU monitor Dynamic Environmental Monitoring System.



Introduction

Dynamic environmental monitoring system is a centralized monitoring of power equipment and environmental variables in all kinds of computer rooms.

A set of perfect the distribution of the dynamic environment monitoring system can separate power equipment and computer room environment, computer security monitoring objects such as signal acquisition, real-time monitoring system and equipment running status, security, recording and processing the relevant data, detect the fault in time, and the necessary remote control, remote regulating operation, timely notify ops staff on duty to deal with.

The purpose is to display the equipment room's few people, unattended, and centralized monitoring and maintenance management of power supply and air conditioning and improve the reliability of the power supply system and the security of communication equipment. It provides powerful technical support for the machine room management automation, intelligent operation and scientific decision making.

Monitoring Object Description



- **UPS:** Collect the main circuit, bypass power quality such as voltage, current, power, frequency, and other information; At the same time, the operating state of the equipment is also monitored, such as UPS on/off state, operation mode and power supply mode, and the working state of its internal key electrical units.
- **Battery:** Collect the voltage, internal resistance, temperature, and other information of a single battery. If the status reaches the warning value, it pushes alarm information in time.
- **Cabinet:** Collect the doors open/close status.
- **Air Condition:** Collect the air supply/return air inlet temperature, compressor working status and temperature and humidity level status.
- **Humidity & Temperature Sensor:** Collect the humidity and temperature at cabinet, the system according to it adjust such as fans status, air conditioning run and stop.
- **Smoke Sensor:** Collect ambient smoke status.
- **Leakage Sensor:** Collect environmental smoke Status. Place the device in a position with water leakage risk. If water leakage occurs, the device detects and generates an alarm.

Data Center Cloud Management Platform

KHIPU Cloud Management Platform, mainly used for centralized management, control, maintenance and data analysis of secondgeneration intelligent cabinets independently developed by PROSE. Relying on modern big data platform and Internet of Things system, we provide first-class products and services to global customers. The system has the following characteristics and advantages:

Centralized management:

- Convenient operational management, can greatly enhance the work efficiency of IT management personnel, and the information management of the enterprise;

Remote maintenance and diagnosis:

- Real-time detect the running state of cabinets, grasps each cabinet, cooling, energy consumption, to ensure the safety of assets;
- To the remote host software upgrade, remain the state of the optimal starting cabinet various performance indicators;

Fault warning:

- On potential risk early warning, and may through SMS, E-mail, real-time APP will alarm information to the equipment administrator, avoid the user property losses;

Big data trend analysis:

- Support export all kinds of intelligence reports, in conformity with the IT standard for IT management personnel planning data center construction, expansion to provide data basis;

Functional and practical:

- Username visualization centralized management of all site equipment status, compared with the conventional DCIM, more targeted, more convenient operation.



Management

- Support each system status display, and graphical presentation.
- Alarm status classification management, convenient operations staff priority processing.
- Support web and mobile APP login view, unattended.



Authority

- Supports multiple user unlock permissions, ensuring strong security.
- Different permissions can be set for different users and the division of labor is clear.



Analysis

- Analyze historical alarm records to determine common faults.
- Analyze routine detection points based on user history data.
- Export data analysis tables for operation and maintenance personnel to view.



Low Cost

- No hardware investment, can run the platform.



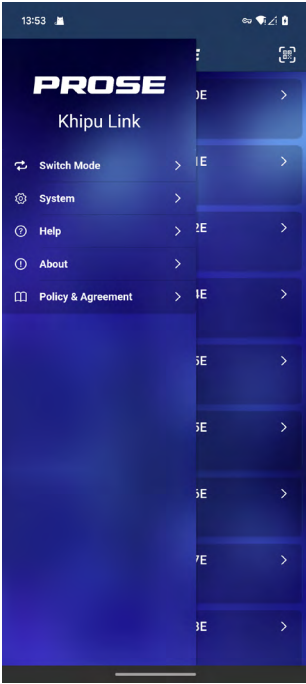
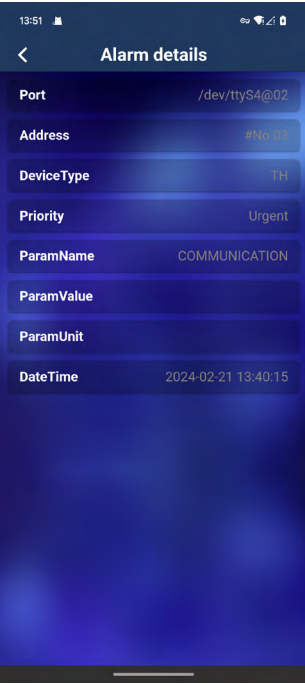
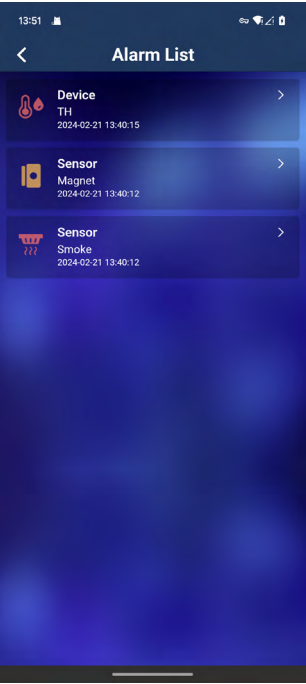
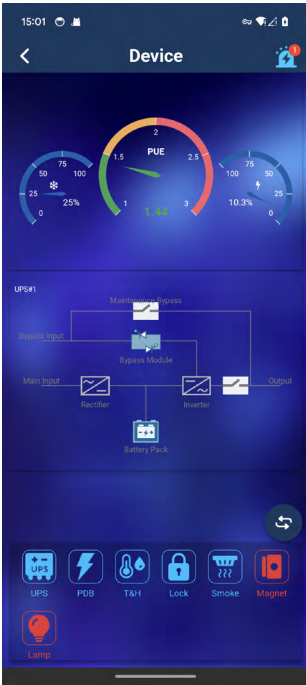
Upgrade Fast

- Supports remote upgrade without personnel duty.



Mobile Application Software for Local Maintenance

KHIPU Link App allows users to conveniently perform local and remote maintenance of data center products via mobile devices. Through the KHIPU Link software, users can view the operational status of devices, alarm information, and create maintenance or inspection tasks. This facilitates maintenance personnel to quickly understand the working status of the equipment remotely or locally, enabling timely maintenance and monitoring.



KHIPU Configuration is used to quickly generate 3D models based on customer requirements. It can visually display of cabinet size, color, material, appearance and free U number, and cost estimates.

This software is to facilitate customer project planning, project evaluation and project design. Automatically generate product PN numbers and module configuration lists to improve product selection efficiency and reduce human selection errors.



Features

- Automatically generate 3D cabinet models based on configuration
- 360-degree preview of 3D cabinet model to simulate real product configuration and product display
- Automatically generate product number to facilitate customer communication and assist ordering
- The configuration table is automatically generated and sent by email to facilitate users to query and retain configuration records
- Product selection is intuitive, fast, and automatically generates configuration lists to reduce human error rates
- B/S architecture, users can access anytime, anywhere

PROSE Structured Cabling System (SCS)

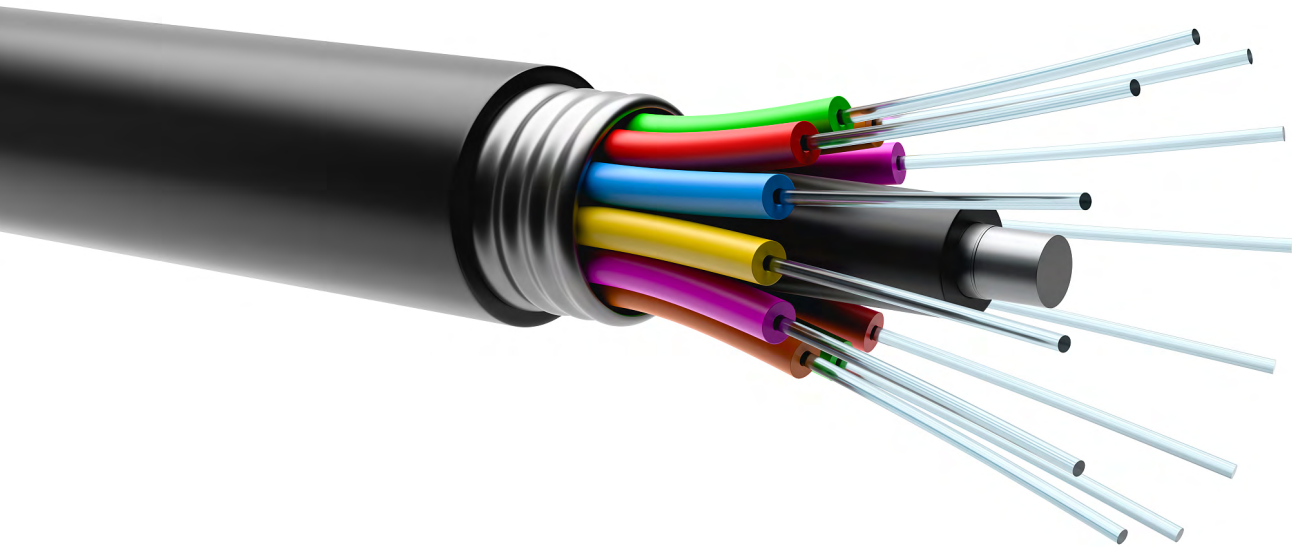
As a professional integrated cabling solution provider, PROSE has a complete cabling solution which can cover from Premises Cabling to Data Center cabling, and applicable to various industries, including Education, Transportation, Heathcare, Government, Finance, Industry 4.0, etc.

PROSE Structured Cabling System provides customer with:

- Shielded and unshielded copper cable system solutions (Classe 3 to 8) for transmission of voice, data, video, CATV, control signals and remote power (Active Ethernet, Enhanced Power over Ethernet)
- Innovative fiber optic system solutions for indoor and outdoor single mode and multi-mode cable applications, from premises cabling system to high-density data center cabling system.

PROSE Structured Cabling System is dedicated to providing the network infrastructure sector with professional, high-quality, flexible, and highly reliable comprehensive cabling products. Our solutions are grounded in advanced technology and innovative design, aimed at meeting the needs of diverse network environments. Our extensive product line is easy to expand and upgrade, ensuring long-term performance and stability. Focusing on quality and detail, every PROSE cabling product is meticulously designed and rigorously tested, ensuring superior support for your network infrastructure. Our goal is to help you build efficient and stable network connections with reliable cabling solutions.

Certification

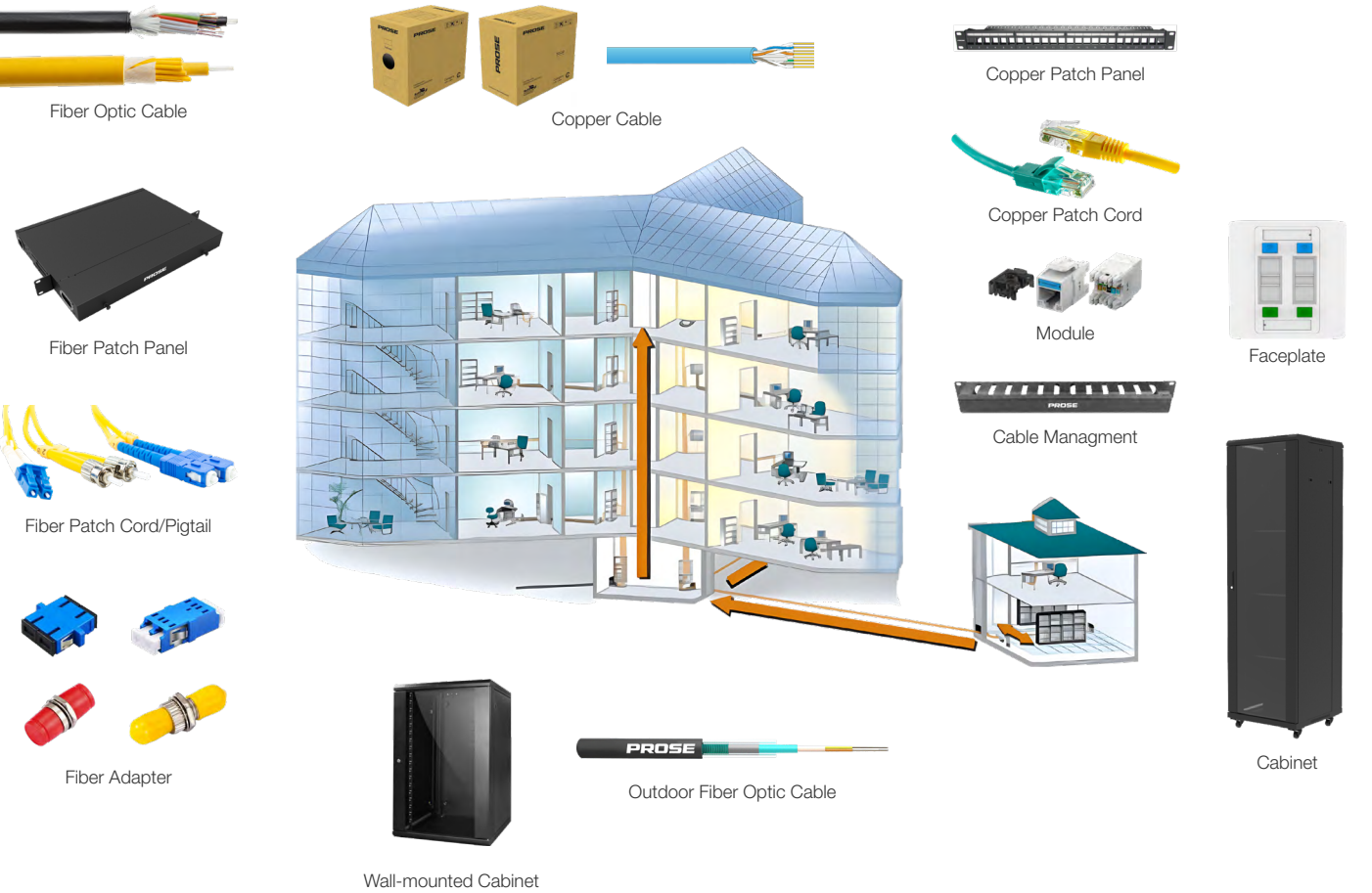


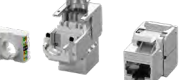
Premises Cabling Solution

Premises Cabling System is a standardized cabling infrastructure designed to support various communication technologies and applications within a building or campus environment. It typically involves a network of cables, connectors, and related hardware, organized in a structured and systematic manner.

Our advantages:

- **Scalability:** It can accommodate future technology upgrades and expansions with minimal disruption to the existing infrastructure.
- **Flexibility:** Allows for easy reconfiguration and rearrangement of network components to meet changing organizational needs.
- **Simplified management:** Centralized management of cabling infrastructure makes troubleshooting and maintenance more efficient.
- **Reduced downtime:** Minimizes the risk of network failures and downtime due to organized and properly maintained cabling systems.
- **Compatibility:** Supports various communication technologies such as voice, data, video, and multimedia applications, ensuring compatibility with a wide range of devices and equipment.
- **Cost-effectiveness:** Provides a cost-effective solution by reducing installation, maintenance, and operational expenses over time compared to ad-hoc cabling setups.



Copper Cable Indoor/Outdoor Cat3/Cat5e/Cat6/Cat6A Cat7/Cat7A/Cat8	 U/UTP  U/FTP  F/UTP  F/FTP  S/FTP  Multi-pair Indoor  Multi-pair Outdoor  Outdoor 4PR Cable
Copper Patch Cord Unshielded/Shielded Cat3/Cat5e/Cat6/Cat6A Cat7/Cat7A/Cat8	 
Copper Patch Panel Unshielded/Shielded Cat3/Cat5e/Cat6/Cat6A Cat7/Cat7A/Cat8	 1HU 24Port Modular  1HU 24Port Modular with Dust Cover  1HU 48Port Modular  1HU 24Port Modular Angled  1HU 24Port IDC  110 Type
Module Cat3/Cat5e/Cat6/Cat6A Cat7/Cat7A/Cat8	 Unshielded Module  Unshielded Module Toolless  Shielded Module Toolless  Cat3 Unshielded Module
Faceplate Plane/Angled/Front-detachable	 Single Port  Dual Port  Four Port  Angled Faceplate  Front-detachable
Plug	 RJ45 Unshielded  RJ45 Shielded  Colored RJ45
Fiber Optic Cable G652.D/OM3/OM4/OM5 LSZH/PE	 Indoor 2-24F  Indoor Stranded  Indoor/Outdoor Glass Yarn  Outdoor Light Armored Central Tube  Outdoor Light Armored Stranded  Outdoor Light Armored AL Tape  Outdoor Heavy Armored
Fiber Patch Cord/Pigtail	 LC/SC/FC/ST Simplex/Duplex 2.0mm/3.0mm  LC/SC/FC/ST Duplex, Uniboot 2.0mm  LC/SC/FC/ST Pigtail 0.9mm

Fiber Optic Adapter SM/MM	 LC Adapter  SC Simplex  SC Duplex  FC Adapter  ST Adapter
Fiber Patch Panel	 Fixed Patch Panel 1HU 12Port/24Port  Sliding Patch Panel 1HU 12Port/24Port  Fixed Patch Panel 1HU 48Port
Wall-mounted Cabinet 6U/9U/12U/15U/18U	 Glass door With mesh frame  Glass door  Mesh door  Steel door
Floor-mounted Cabinet 22U/27U/32U/37U/42U/47U	 27U Network Cabinet  37U Network Cabinet  42U Network Cabinet  42U Server Cabinet
Cable Management Horizontal/Vertical	 Horizontal Metal  Horizontal Plastic  Horizontal 110 Type Plastic  Vertical Metal+Plastic

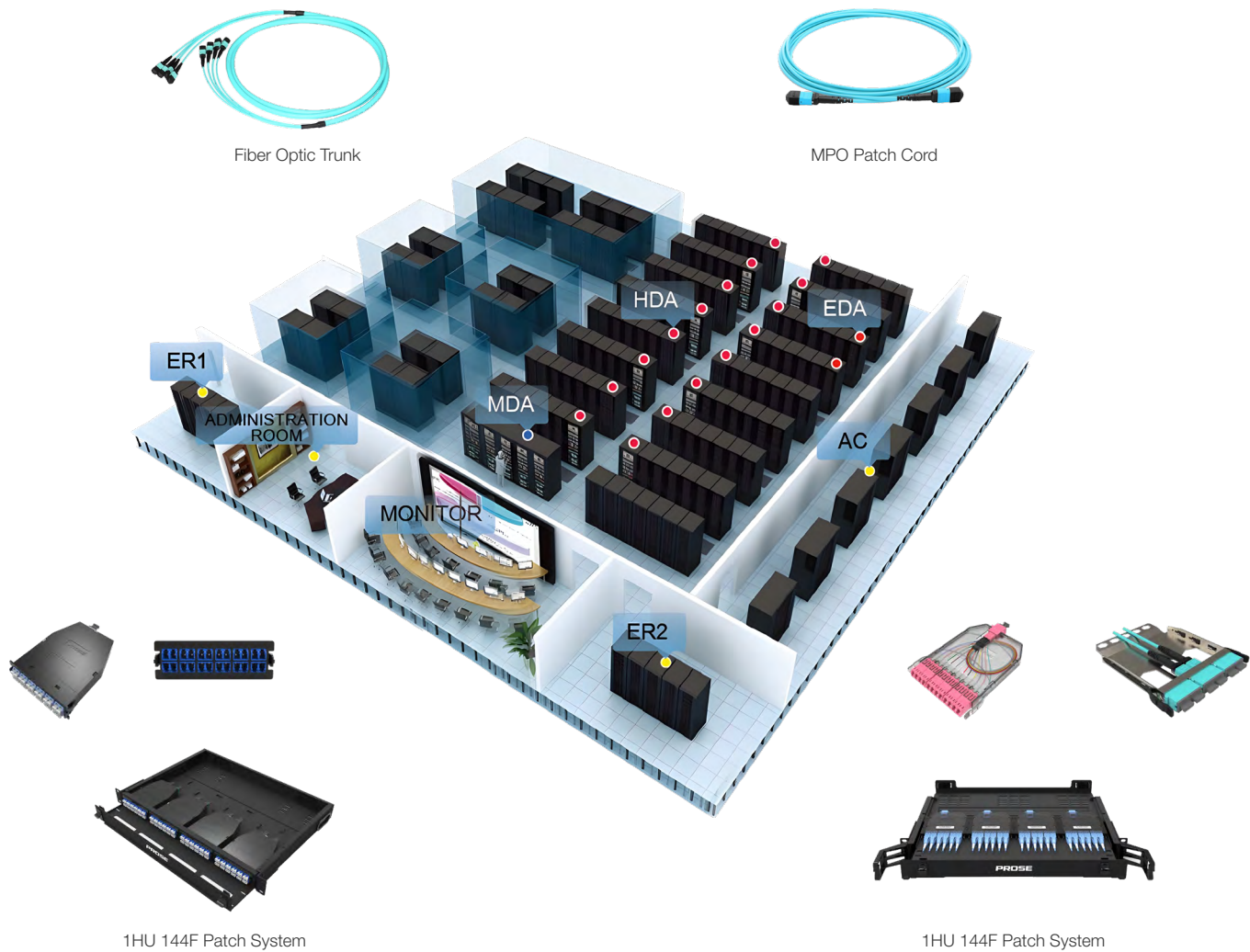
Note:
The list above only shows a selection of typical high-density products. For more detailed information, please contact us to request the complete version of the product manual.

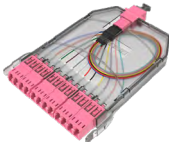
Data Center Cabling Solution

Data Center Cabling System refers to the structured cabling infrastructure specifically designed to support the networking and communication needs of a data center environment. It involves the installation of high-performance cables, connectors, and related hardware to interconnect servers, storage devices, networking equipment, and other critical infrastructure components within the data center.

Our advantages:

- **High performance:** It provides high-speed connectivity to support the demanding requirements of modern data center applications, including cloud computing, big data analytics, and virtualization.
- **Future-proofing:** A well-designed data center cabling system anticipates future technology trends and standards, allowing for seamless integration of new equipment and technologies as they emerge.
- **Reliability:** The structured cabling design minimizes the risk of network downtime and disruptions by ensuring proper cable management, redundancy, and fault tolerance.
- **Scalability:** Allows for easy expansion and upgrades to accommodate growing data center needs without requiring significant rework or downtime.
- **Improved airflow and cooling:** Proper cable management techniques within the data center cabling system help optimize airflow and cooling efficiency, enhancing overall energy efficiency and reducing operating costs.
- **Simplified maintenance:** Organized cabling infrastructure makes it easier to identify and resolve issues, reducing troubleshooting time and minimizing the impact on operations.



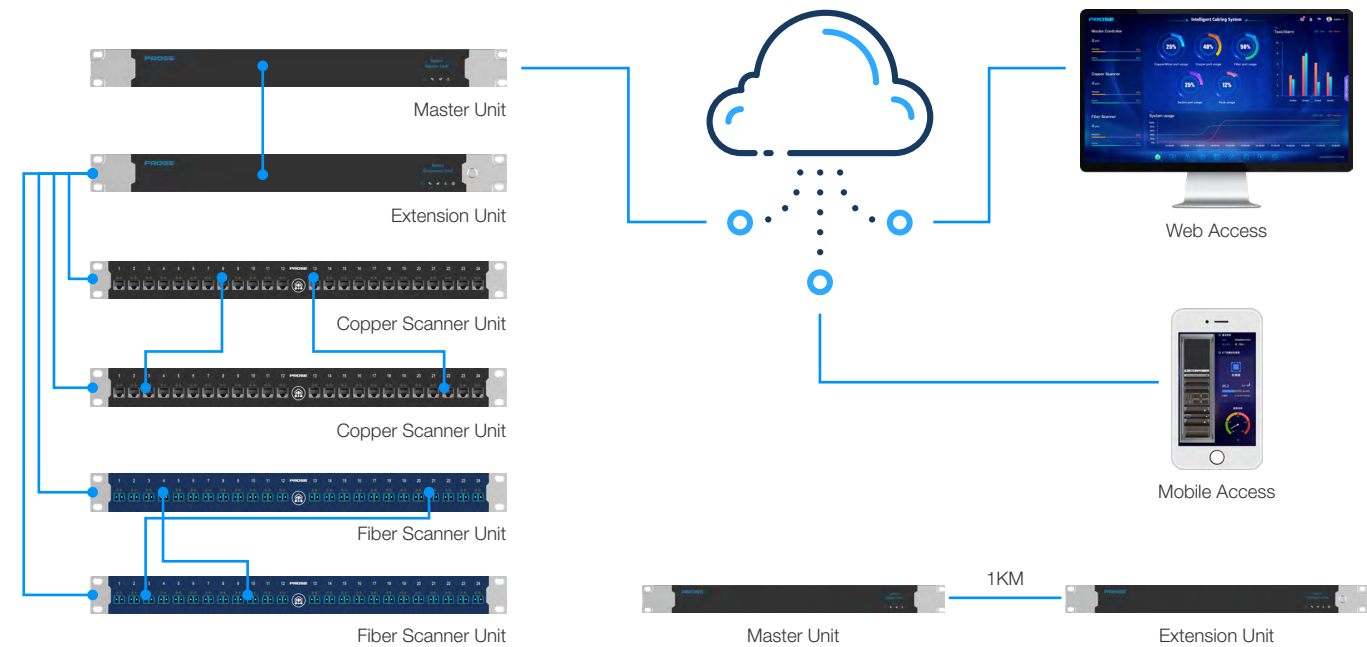
Fiber Optic Trunk			
	MPO-MPO	LC-SC	SC-SC
96F/1HU Series Patch Panel			
	1U 96F Patch Panel	MPO-LC Cassette	LC Adapter Plate
144F/1HU Series Patch Panel			
	1U 144F Patch Panel	4U 576F Patch Panel	MPO Adapter Plate
Hybrid Patch Panel			
	Hybrid Patch Panel		
MPO Patch Cord			
	12F MM Patch Cord	12F SM Patch Cord	

Note:
The list above only shows a selection of typical high-density products. For more detailed information, please contact us to request the complete version of the product manual.

PROSE Intelligent Cabling System (ICS)

PROSE Intelligent Cabling System is an efficient intelligent infrastructure management system that utilizes a combined hardware and software management approach. It enables real-time and effective planning and management of fundamental infrastructure elements such as network connections, rack space, power, temperature, and humidity throughout the system. While ensuring the normal operation of network facilities in real-time, it also serves as an intelligent infrastructure configuration management and planning tool. Through intelligent process control, it provides efficient maintenance and management, greatly enhancing the return on investment for enterprise IT.

PROSE management system is mainly composed of a master, extension unit, copper scan unit, fiber scan unit, copper patch cord, fiber patch cord and OMC system management software. Software development using B/S architecture. The system adopts ANSI/TIA-568C and IEC/ ISO11801 standard in cross-connection or inter-connection of various schemes. The hardware structure of the system adopts the modular structure, which makes the whole configuration management the most flexibility.



Master Unit	Extension Unit	Copper Scanner Unit	Fiber Scanner Unit
			
Voltage: 85VAC~264VAC Max. power: 15W	Voltage:85VAC~264VAC Max. power: 30W	Voltage: 5VDC Rated power: 1.0W Max. power: 2.5W	Voltage: 5VDC Rated power: 1.0W Max. power: 2.5W
Support 24pcs Extension Unit	Support 24pcs Scanner Unit	1HU support 24 ports	1HU support 24 ports

ICS Management

ICS Management is designed to provide users with efficient and reliable cabling solutions. With features such as site management, device management, port management, link management, asset management, drawing management, permission management, and user management. ICS Management enables users to effectively manage and monitor their cabling systems.

Software Key Function

- Project Visualization
- Real-time Data Monitoring
- Guide Connecting On Site
- Unauthorized Access Alarm
- Quick Information Inquiry
- Drawing Upload and Download
- Smart Phone Monitoring
- Multi-account Management
- Infrastructure Data Acquisition



Minimum Configuration Requirement:

Item	Parameter	Technical Specification
Hardware	CPU	≥4 (Core) 64bits
	Memory	≥16.0GB
	Hard Disk	≥500GB
	Ports RJ45	100M/1000M
	Bandwidth	10M
Software	Operation system	Windows Server 2015 or above
	Database	Mysql 5.7 or above
	Web Server	Internet Information Services 8 or above
	Runtime	.Net 4.5.2
	Browser	Google Chrome

ICS Vision

ICS Vision designed to provide users with efficient and reliable cabling solutions. With features such as site management, device management, port management, link management, work order management, asset management, drawing management, permission management, and user management.

ICS Vision enables users to effectively manage their cabling systems.

Software Key Function

- Project Visualization
- Work Order Center
- Assets Management
- Unauthorized Access Alarm
- Quick Information Inquiry
- Drawing Upload and Download
- Smart Phone Monitoring
- Multi-account Management
- Infrastructure Data Acquisition



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	Web Server	Internet Information Services 8 or above
	Runtime	.Net 4.5.2
	Browser	Google Chrome

PROSE Service

PROSE offers professional services that improve network design, reliability, scalability and efficiency.

Our service core competences include:

- Network optimization
- Technical consultation
- Customized product design
- Installation & commissioning
- Onsite training & supervision
- System troubleshooting
- After-sales services

In addition, we also offer professional training, technical support and workshops for distributors and agents. We are committed to offering exceptional services for our customers.

PROSE is much more than just a supplier – PROSE is a valued development partner and we will strive to meet new challenges in order to scale to new heights.



PROSE

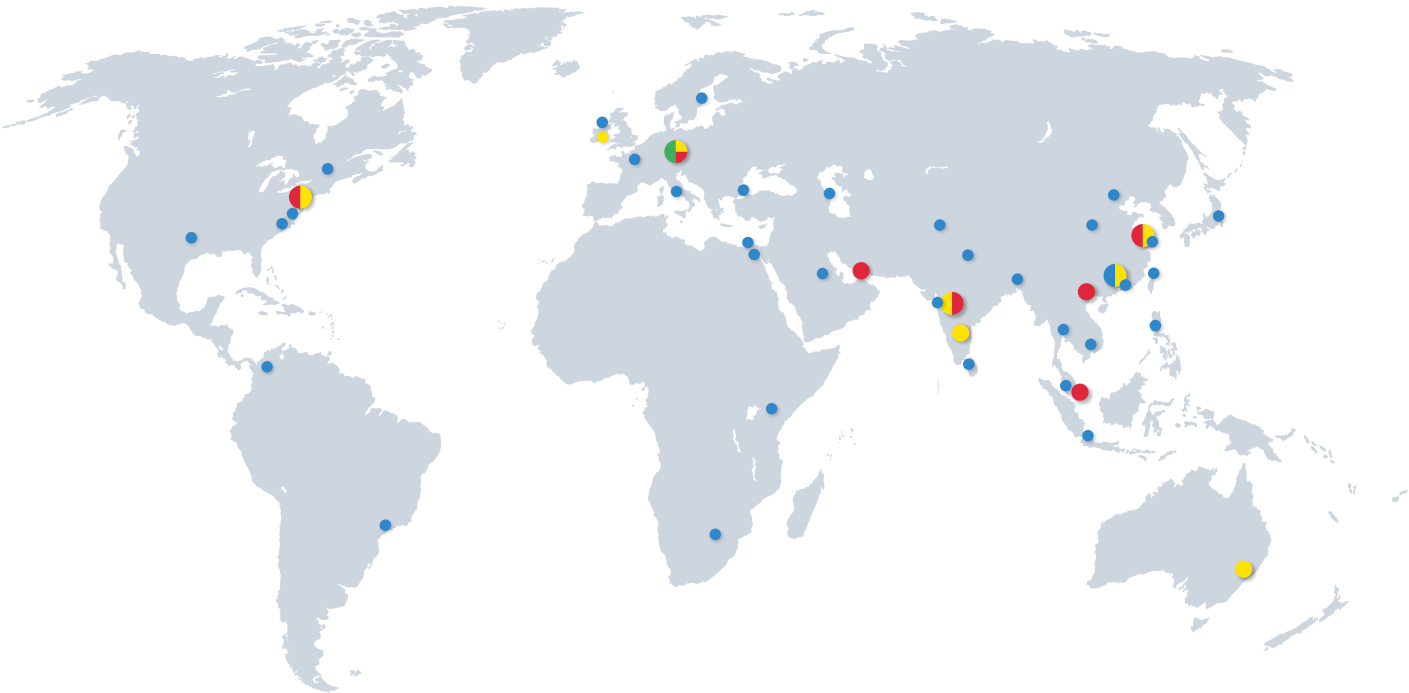
DIGITAL WORLD PRODUCTS

BUSINESS UNIT

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GLOBAL FOOTPRINT



- HQ
- PRODUCTION / OPERATIONAL HUB
- R&D CENTER
- SUBSIDIARIES / SALES REPRESENTATIVES



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www.ProseTechnologies.com

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