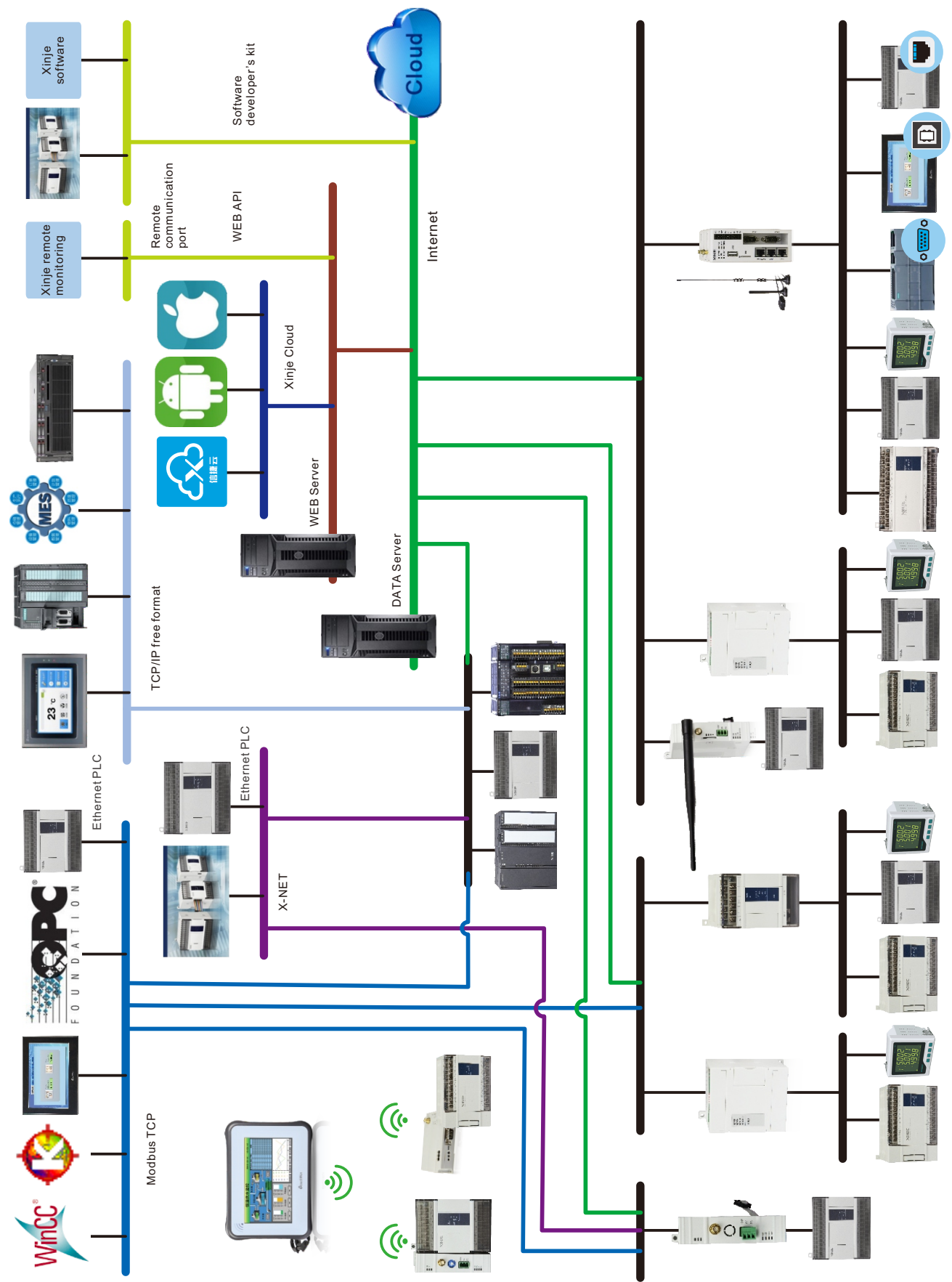


INDUSTRIAL INFORMATIZATION

4G Series / WIFI Series / Ethernet Series / full function Series / SBOX Series



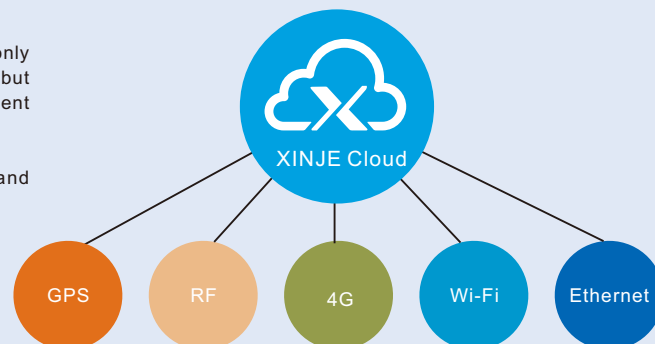
- Various forms of data access
- Compatible with the mainstream brands in the market
- Deep customization to meet a variety of on-site needs
- WEB and APP monitoring mode, keep the equipment under control



Product Overview (Hardware)

The gateway product developed by Xinje company not only realizes the online debugging function of the controller, but also provides great convenience for the digital management of data.

Typical applications: Controller expands gateway and connects to SCADA system, accessing Xinje Cloud.



A-BOX module

Product description

A-BOX is a data communication module which integrates the three modes of Internet access: 4G, WIFI and Ethernet. It supports serial port, USB port and Ethernet port to connect industrial control equipment, and realizes the communication network of various devices.

There are two working modes. The remote transparent transmission mode can upload and download device programs through the host computer, and the data monitoring mode can cooperate with Xinje Cloud to remote monitor equipment parameters.

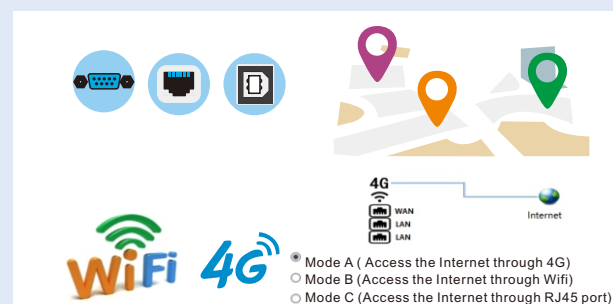


Support equipment (serial port, USB port, Ethernet port)

Equipment information	Network module	Online programming	Online monitoring	Other
Serial port equipment	A-BOX	Support	Support Xinje XC, XD series, Siemens, Mitsubishi, etc.	Provide PC development interface
USB port equipment	A-BOX (optional function)	Support	Not support	
Ethernet port equipment	A-BOX	Support	Support Xinje XD, XG, XL series, Siemens, Omron, etc.	

Product features

- Support various Internet access modes: 4G, WIFI, Ethernet
- Support various equipment access: serial port equipment, USB port equipment, Ethernet port equipment
- Support various serial port communication modes: RS232, RS485, RS422
- Persistent online, with disconnection redial and watchdog functions
- With 4G routing function, support WIFI, Ethernet internet access function
- Support PLC, HMI remote upload download program in transparent transmission mode
- Support more devices accessing Xinje Cloud to realize data remote monitoring
- Support GPS function



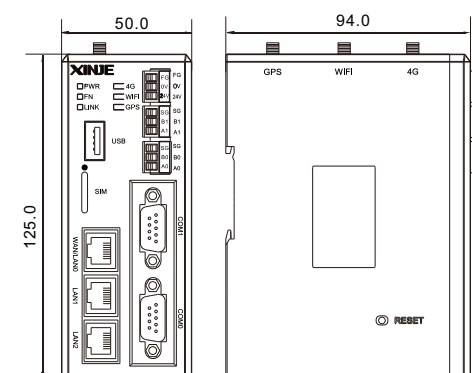
Module antenna



Application scenarios

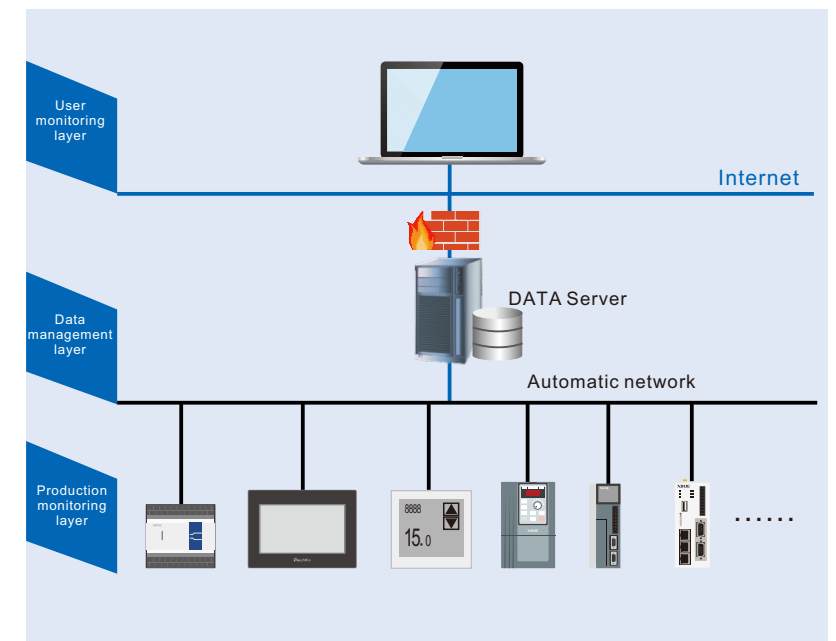
- Equipment after-sales service
- Heating ventilating and cooling
- Manufacturing
- Warehousing logistics
- Intelligent agriculture, farming
- Sewage treatment
- Smart building
- Electric power monitoring

Product dimension (unit: mm)

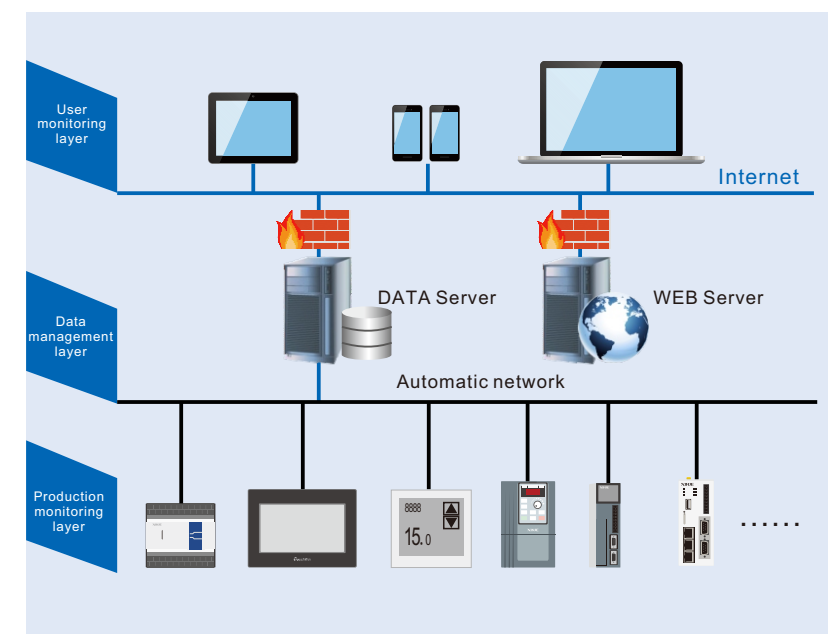
Industrial Informatization **4G/WIFI/Ethernet/Full functions/SBOX Series**

Typical network topology for product application

- Remote management of equipment through remote transparent transmission function



- Remote monitor the equipment through Xinje Cloud



Product Introduction

4G Module

Product description

The 4GBOX product is a wireless data communication module based on the operator network, supporting TCP/IP protocol, cooperating with XD or XC series PLC, which is widely used in automation system to realize remote wireless monitoring of automation system.

The monitoring methods are short message, XC/XD series PLC software, website, APP, etc.

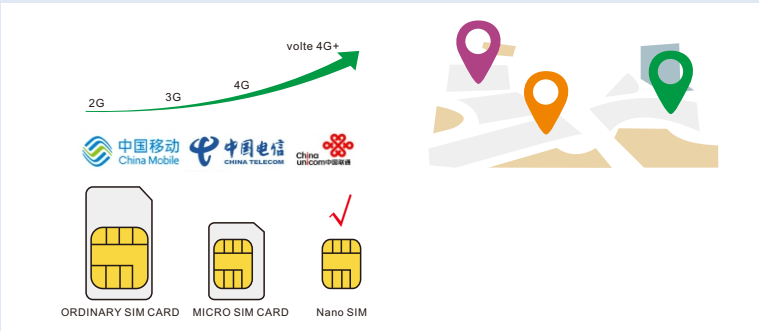


Support device (Modbus, X-NET)

Device information	Network module	Online programming	Online monitoring	Other
XC	4GBOX	Support	Support	Provide PC development interface
XD(version v3.4.5 or above)	XD-4GBOX-ED	Support	Support	
Modbus RTU	4GBOX	Not support	Support	

Product features

- Fit for all kinds of 4G/3G networks
- International roaming
- GPS function
- Persistent online, redial and watchdog function
- Multiple status markers including module operation information, signal intensity, SIM card binding
- Short message data monitoring function
- RS232/485 serial port connection mode
- 24V DC power supply
- Support Nano SIM card
- Standard configurations are SMA connector and High gain data antenna



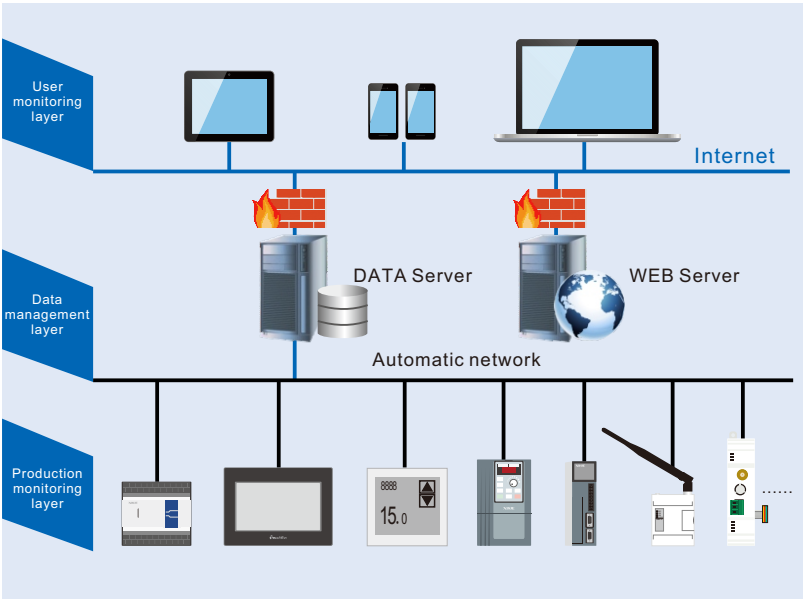
Module antenna



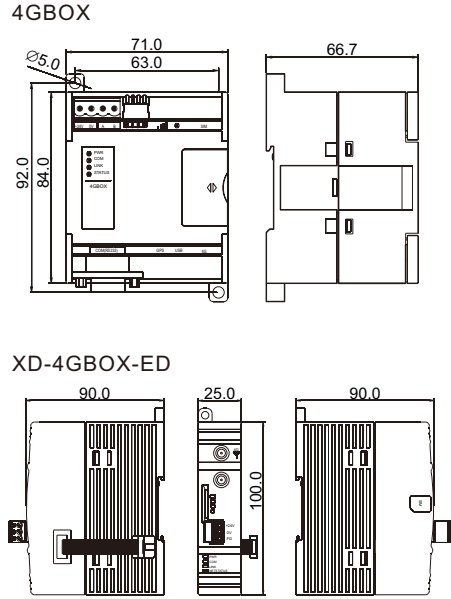
Application scenarios

- Equipment after-sales service
- Intelligent agriculture, farming
- Sewage treatment
- Disposal of kitchen waste
- Smart building
- Electric power monitoring

Typical network topology for product application



Product dimension (unit: mm)



WIFI Module

Product description

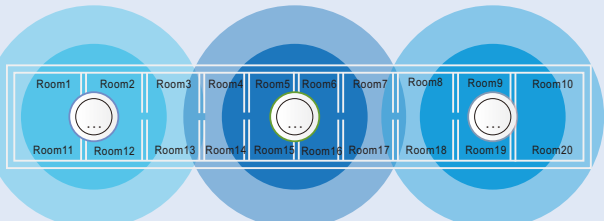
WBOX is a wireless data communication module based on WLAN technology. It supports X-NET and Modbus-RTU protocol devices. The wireless terminal provides X-NET and Modbus-RTU protocols. With XC and XD series PLC, it is widely used in automation system to realize wireless monitoring and dispatching of automation system.

Support device (Modbus, X-NET)

Device information	Network module	Online programming	Online monitoring	Other
XC	W-BOX	Support	Support	Provide PC development interface
XD(version v3.4.5 or above)	XD-WBOX-ED	Support	Support	
Modbus RTU	W-BOX	Not support	Support	

Product features

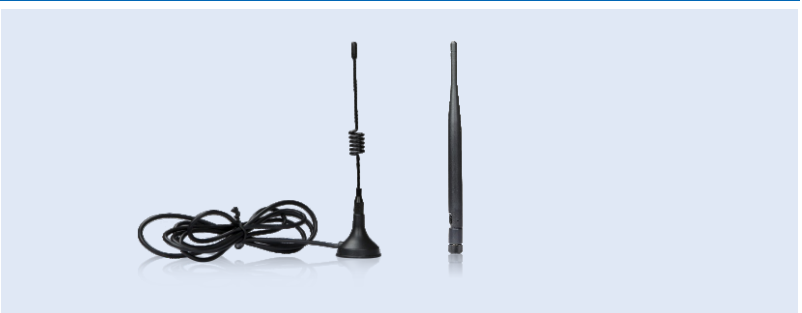
- Support AP (wireless hotspot) and STA mode
- Support multi-wireless hotspot automatic roaming technology (typical time <500ms, max time 2000ms)



- Persistent online, redial and watchdog function
- Up to four master stations synchronous monitoring inIntranet
- Support simultaneous monitoring of Intranet and Extranet
- Support XNET fieldbus based on TCP/IP
- Connect to SCADA through Modbus TCP
- 2.4GHz wireless WLAN technology
- RS232/485 serial port connection mode
- 24V DC power supply
- Standard configurations are SMA connector and High gain data antenna
- With the function of signal strength and operation status indication

Product Introduction

Module antenna

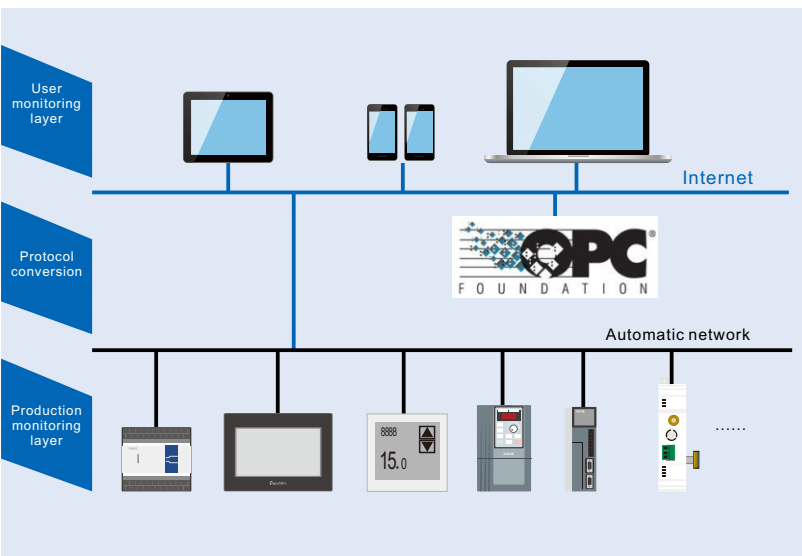


Application scenarios

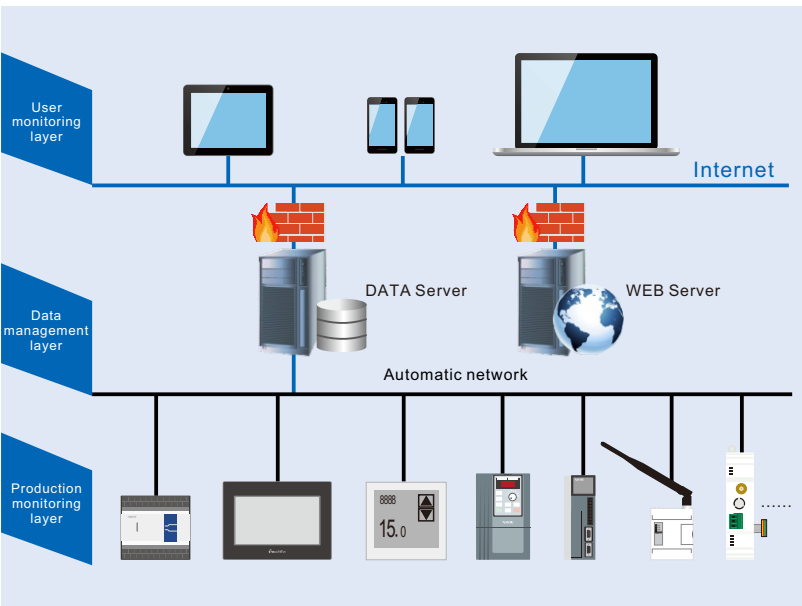
- Production information management
- Smart home, touring car
- Warehousing and logistics
- Production and processing, bridge crane wireless dispatching
- Reconstruction of digital workshop

Typical network topology for product application

•Realizing field Ethernet control of equipment

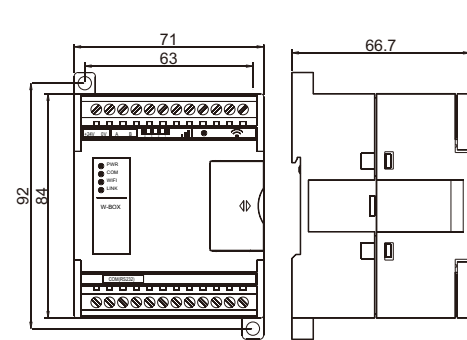


•Realizing remote monitoring of equipment

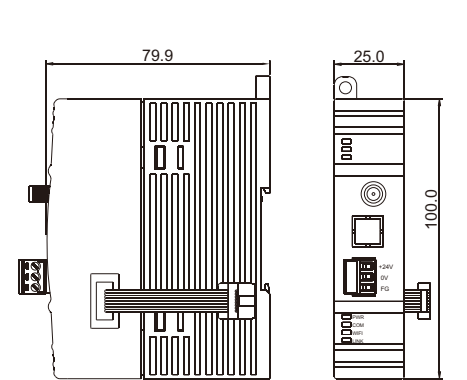


Product dimension (unit: mm)

•W-BOX



•XD-WBOX-ED



Ethernet Series

Product description

The Ethernet module T-BOX uses 10M adaptive RJ45 interface, supports Modbus TCP and Modbus RTU communication protocol, and enriches the communication connection between automation systems. The connection mode of supporting DCS system breaks the island state of traditional industrial automation. The main monitoring methods are XC/XD series PLC software, website, APP, Kingview, Wincc and so on.

The Ethernet series PLC has 10/100M adaptive RJ45 interface, which supports the communication protocols of Modbus TCP, X-NET, TCP/IP free communication. It can connect with various network devices, support multi-thread communication, and communicate with multiple devices simultaneously. Compared with the Ethernet module, it enhances the bandwidth of the network ports, enhances the throughput of data communication, enriches the communication protocol, supports the interconnection with more network devices, optimizes the mode of use, and facilitates user configuration and programming.

Support device

Module model	Device type	Online programming debugging	SCADA monitoring	Other
T-BOX	XC	Support	Support	Provide PC interface for remote connection
	XD	Support	Support	
	Modbus RTU	Support	Support	
Ethernet series PLC		Support	Support	Provide local, remote communication interface

Device type	Communication protocol	Communication interface	Using method
T-BOX	Modbus TCP	10M standard RJ45 interface	Set through DIP switch,instruction programming
Ethernet series PLC	Modbus TCP, X-NET, TCP/IP free communication	10/100M adaptive RJ45 interface; some models are equipped with dual Ethernet ports, with switch functions	One-click configuration without DIP switch, wizard programming, support static IP, automatic obtaining IP

Product features

- Support simultaneous Intranet and Extranet working mode
- Up to four master stations synchronous monitoring in Intranet
- Support Modbus TCP to connect SCADA
- Support Modbus TCP master slave mode
- TBOX supports RS232C, RS485 serial port connection mode
- TBOX provides the indication function of the running state signal
- Ethernet PLC uses 10, 100M adaptive Ethernet port
- Ethernet PLC supports XNET bus based on TCP, IP
- Ethernet PLC supports TCP, IP free communication

Module connection

There are two common wiring modes for Ethernet devices: twisted pair and optical fiber. Generally, twisted pair is used for short distance connection. CAT5e or CAT6 cables are recommended for field wiring. The theoretical communication distance of standard network cable is 100m. Optical fibers are commonly used for long distance connection. The communication distance of glass fibers with optical transceiver can reach 20km.

RJ45 interface of CAT5e cable

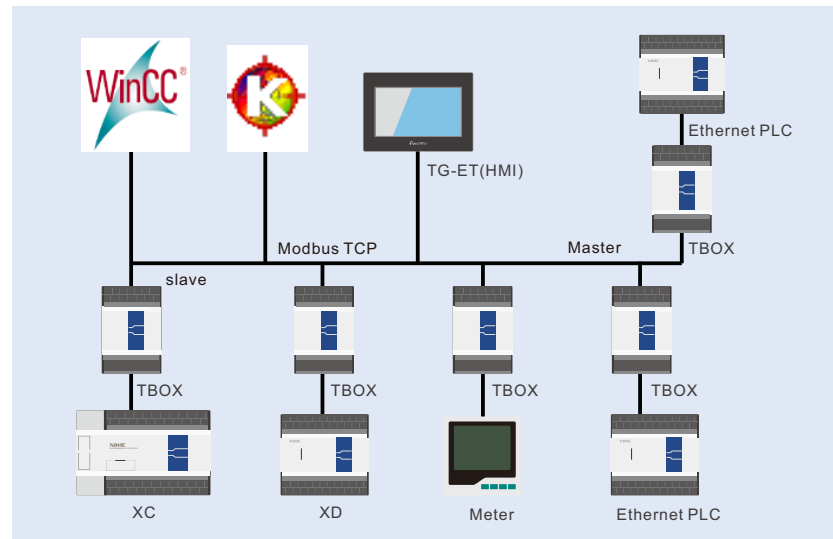
Optical fiber

Product Introduction

Industrial Informatization **4G/WIFI/Ethernet/Full functions/SBOX Series**

Typical network topology for product application

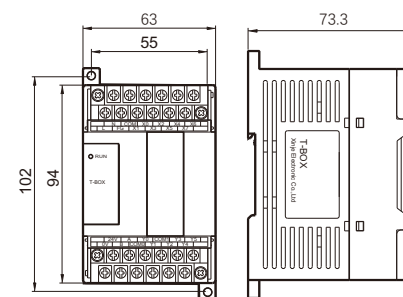
- T-BOX LAN can realize field Ethernet control of equipment



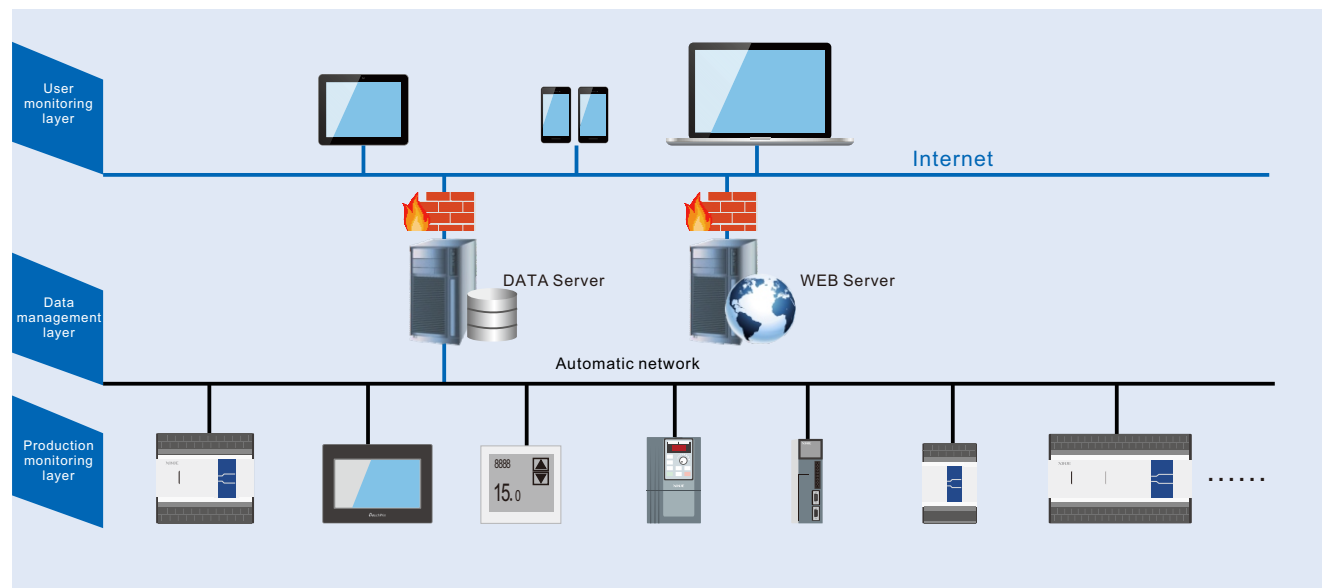
Application scenarios

- Food processing
- Warehousing logistics
- Sewage disposal
- Power plant
- Mine electromechanical
- Petrochemical industry

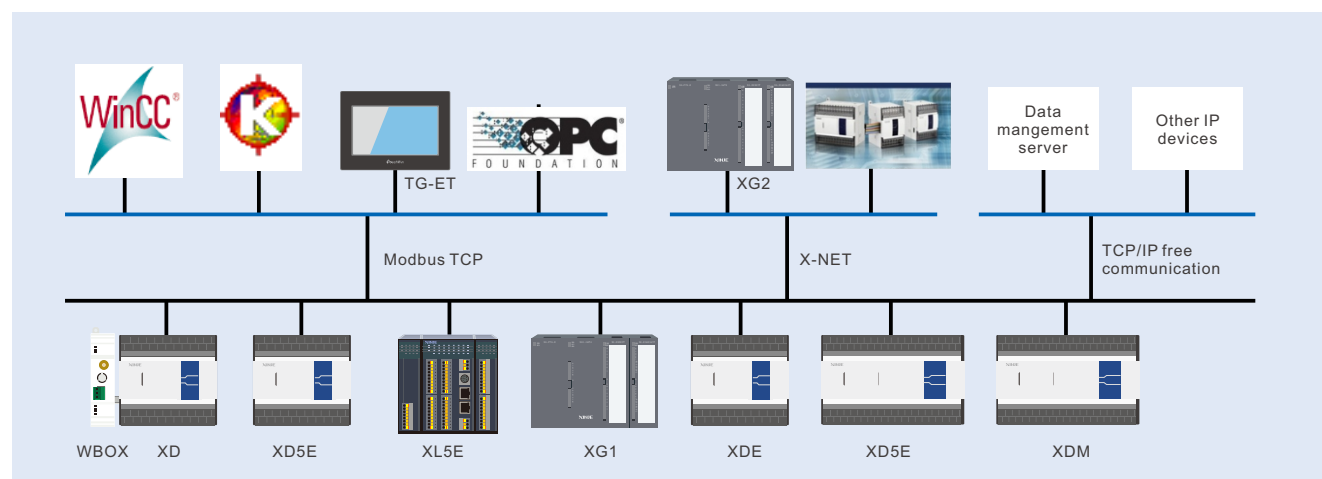
Product dimension (unit: mm)



- Realization of remote control of equipment



- Ethernet PLC can realize field Ethernet control of equipment



S-BOX

Product description

SBOX is an ultra-short-distance wireless communication module based on radio frequency technology. The device data is transparently transmitted, supporting Xinje, Delta, Fatek, Omron, Matsushita and other brands. It is widely applied to field equipment debugging, realizing the short-distance wireless communication function of automation system.



Support device

Xinje, Delta, Fatek, Omron, Matsushita, Mitsubishi (232BD) and so on.



Applied range

- Wireless meter reading, wireless sensor
- Container information management
- Automated data management
- Industrial control, telemetry, remote sensing
- POS system, asset management
- Building automation and security
- Power high temperature and high voltage monitoring

Module antenna

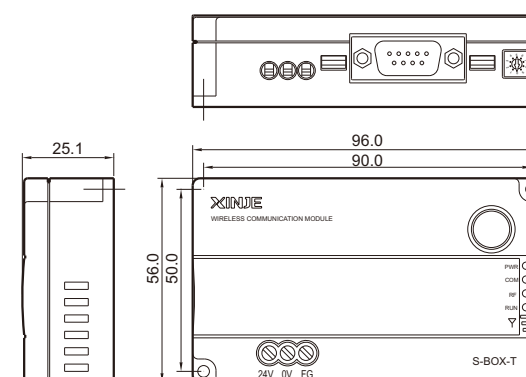


Product features

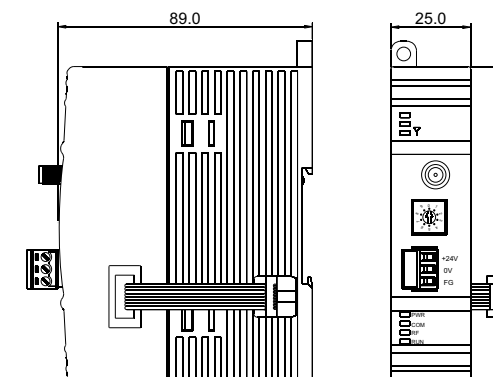
- Radio frequency data module S-BOX is based on 433MHz carrierband.
- The serial communication parameters of the device are 19200, 8, 1, E, and users can not modify this parameter.
- In order to meet the needs of field transmission distance, air speed provides 4800-115200bps multi-level serial port speed regulation, the higher the transmission rate, the shorter the transmission distance.
- It provides 10 channel choices to improve the anti-jamming ability of the equipment. The default is channel 0. Users can adjust it according to the actual situation on site.

Product dimension (unit: mm)

- S-BOX-T



- XD-SBOX-T-ED



Product Introduction

Software

Xinje Cloud - Cloud Manufacturing

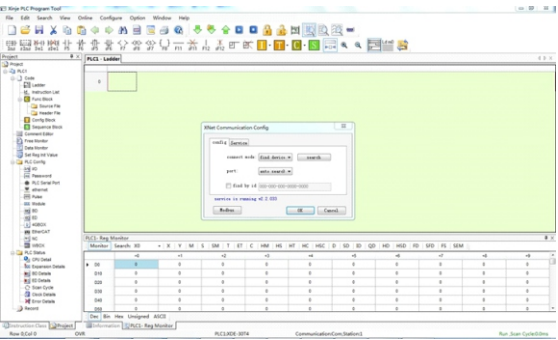
What is Cloud manufacturing?

Xinje cloud manufacturing information platform is based on the deep cultivation and extensive application of products for many years. It is an industry application platform for remote data acquisition. It covers the functions of device access, device management, data storage, graphics configuration, data display, data analysis, user management, etc. It supports simultaneous monitoring of web page and mobile app.



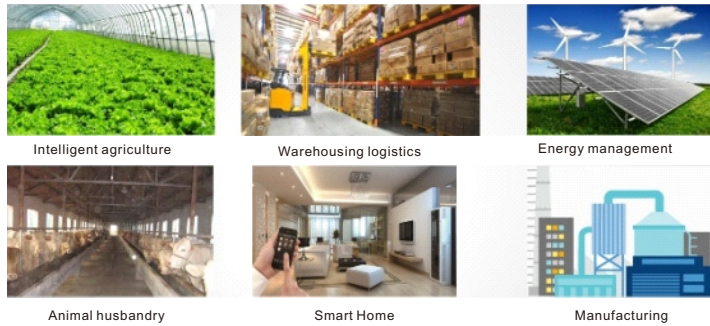
Online programming

It can realize PLC software remote uploading, downloading, monitoring through network module.



Industry application

- Remote diagnosis of equipment faults
- Equipment after-sale reliability maintenance, such as air compressor after-sale maintenance
- Data authenticity assurance of test equipment, such as lithium battery testing
- Intelligent city construction, such as sewage treatment, garbage recycling, cold storage
- Intelligent agriculture, smart home, smart car and other industries



Outstanding performance advantages

- Rich terminal access mode (2G/4G/WIFI/Ethernet)
- Flexible connectivity, support Xinje full series PLC and standard Modbus-RTU protocol equipment accessing
- Web graphics SCADA, more rich presentation forms
- Platform is easy to understand, free of teaching, easy to start
- History data, operation log can be queried
- Equipment alarm, maintenance reminder
- Support multi-terminal, PC, Android, IOS



Comparison of Xinje cloud and traditional SCADA

- Advantages:
- ①Support remote operation
 - ②Support permission assignment
 - ③Support operational log traceability
 - ④Regional management of discrete equipment
 - ⑤Support mobile APP

- Disadvantages:
- ①The timeliness is slightly worse than that of traditional SCADA
 - ②Poor animation



Rich products access

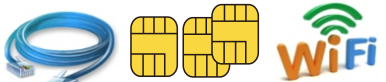
Support Xinje XC series, XD series, HMI and other brands which support Modbus-RTU protocol.

X-NET Modbus-RTU



Various network modules

Wireless		Wired (Ethernet)	Wireless, wired optional
4G	Wifi		
XD-4GBOX-ED	XD-WBOX-ED	T-BOX	A-BOX
4G-BOX	W-BOX	Ethernet series PLC	



Type selection reference

Module	XC series	XD series	XINJE HMI	Modbus-RTU
A-BOX	✓	✓	✓	✓
XD-4GBOX-ED	×	✓ (PLC version v3.4.5 and up)	×	×
4G-BOX	✓	✓	✓	✓
XD-WBOX-ED	×	✓ (PLC version v3.4.5 and up)	×	×
W-BOX	✓	×	✓	✓
T-BOX	✓	✓	✓	✓

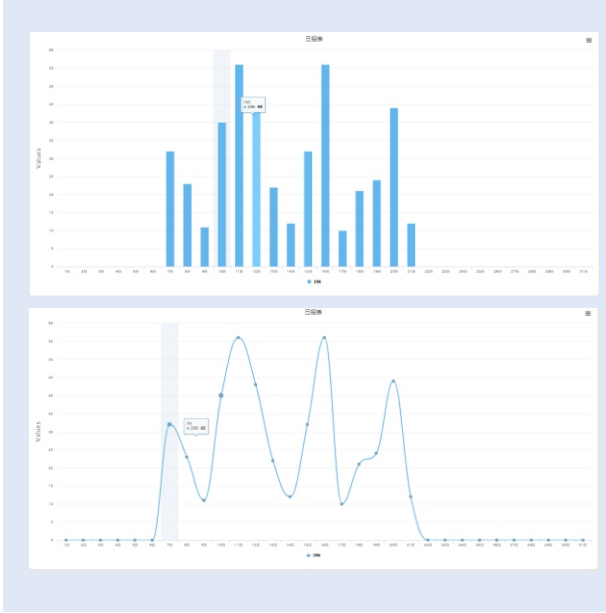
Rich graphic editing

Support web graphic SCADA, more vivid display of equipment data, improve product service quality.

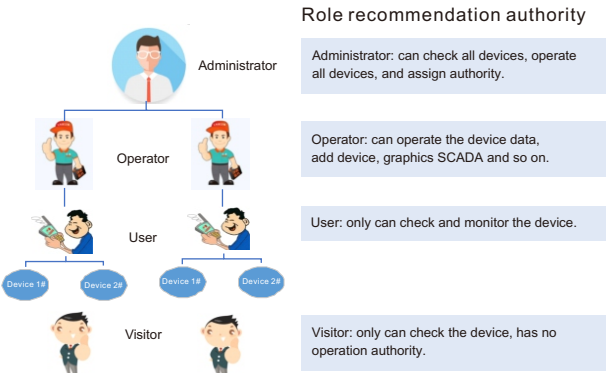


Powerful data analysis

Provide more abundant forms of data presentation, including histograms, polygons, dashboards and other forms to display real-time data.



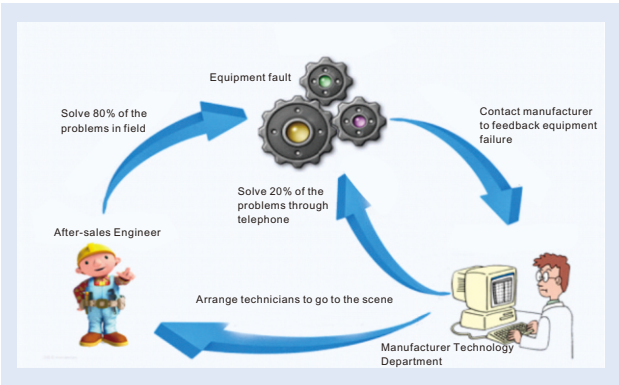
Rich user-defined privilege separation



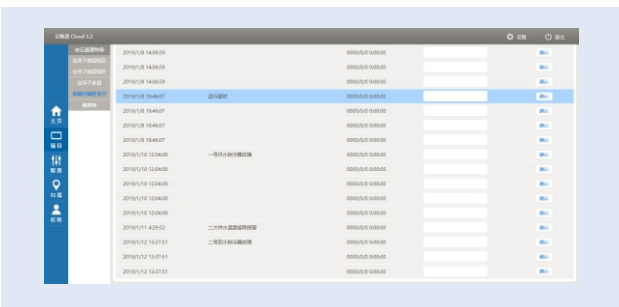
Product Introduction

Fault alarm and warning of equipment

•Fault alarm warning



•Alarm record inquiry



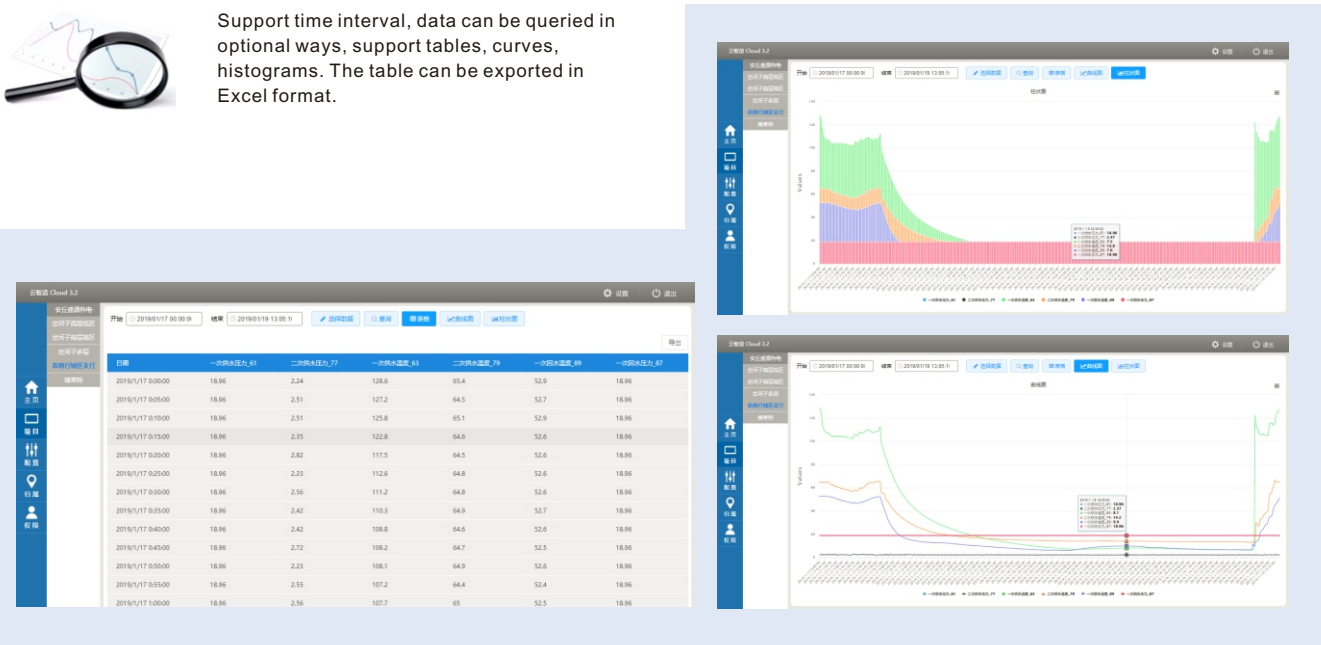
•Mobile app push



Historical data query



Support time interval, data can be queried in optional ways, support tables, curves, histograms. The table can be exported in Excel format.

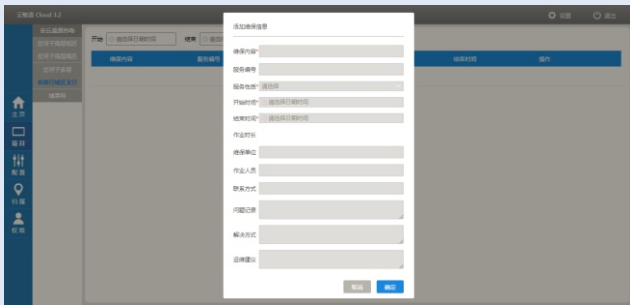
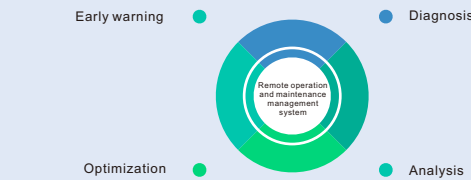


Multivariable reports

Support time interval, data can be queried optionally, report data support different products daily, monthly, annual output check and comparison (update every 2 minutes), support tables, curves, histograms, where tables can be exported in Excel format.

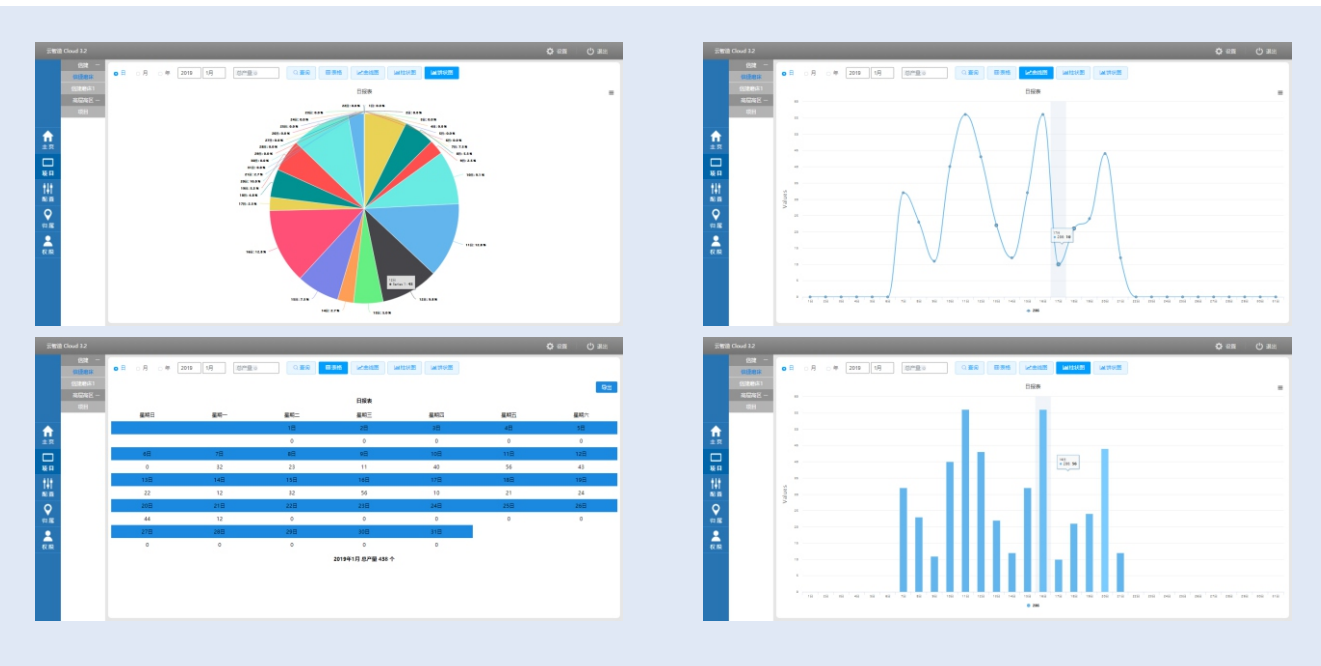
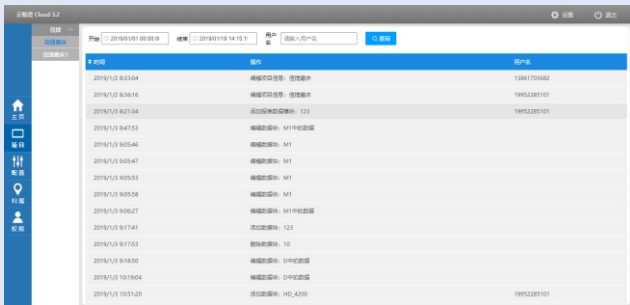
After-sale maintenance reminder

Through timely acquisition of vulnerable parts life, abnormal operation and other information, the equipment manufacturer generates business information system, which not only provides solutions for customers to replace traditional manual management, improves the service level of enterprises, but also provides accurate information system for enterprises after-sales, and improves profitability.



Operation log

The system will record part of the operation status, operation records, generate user operation logs, ensure the safety and integrity of the logs, and provide the function of querying the logs by operator, operation time and operation content.



Product Introduction

Video

Provide third-party video access, synchronous monitor the scene environment, equipment operation status and other information in the web and mobile phone.



Mobile phone APP

