PUSR®

Node red programing Modular IO

USR-M300

Programming PLC

Open source gateway

Protocol converter

SIX IN ONE

Edge computing gateway

Extended IO

4g Router

Node-red progarming IOT gateway | USR-M300

· EDGE COMPUTING： Up to 2000 data points
· NODE-RED： Low-code programming
· PROTOCOLS： Modbus RTU/TCP, OPC UA
  Server,Bacnet,IEC645,*IEC104,*IEC61850,etc.
· HARDWARE INTERFACE： GPS, RS232,
  RS485, DI, DO, AI
· RICH INTERFACE： RS232/485,IO,Ethernet,Wi-Fi

Modular IO gateway | USR-M100

· EDGE COMPUTING Edge acquisition, computing
  and automatic reporting+
· DATA SECURITY SSL/TLS encryption in TCP client,
  HTTP client, MQTT
· EXTENDABLE IO 2DO/2DI/2AI， 2 ethernet port and
  IO Expandable
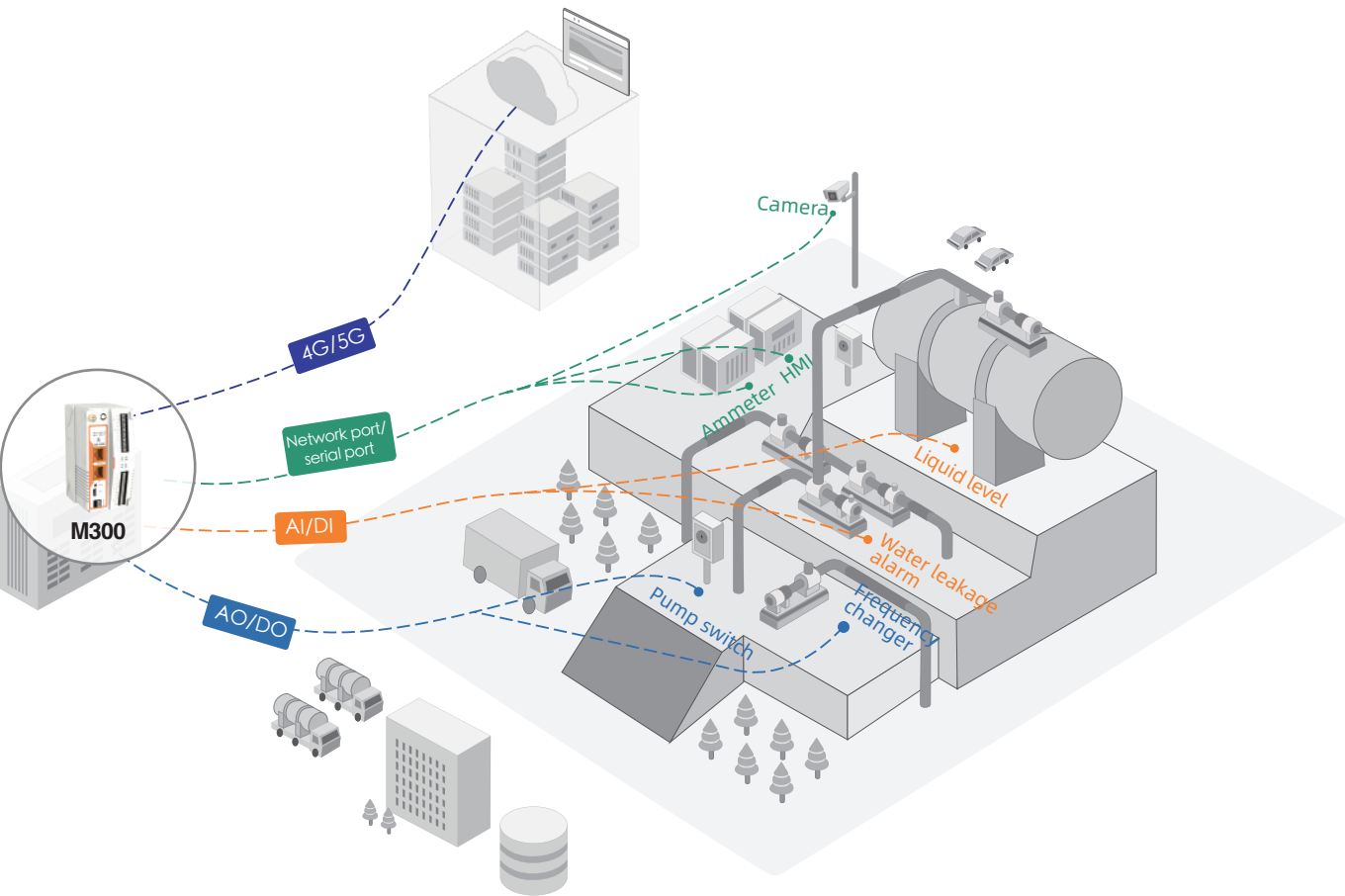· MANAGEMENT Device monitoring, firmware upgrading

Arduino Open Source IoT Gateway
USR-M100-ARD

· PROCESSOR： ESP32 Chipset
· OPENSOURCE： SDK demo provided
· EASY TO DEVELOPEC and Python

The pumping station was unattended

M300 supports graphical programming, can write a variety of control logic like PLC, can be connected to touch screen, camera, various sensors, instruments, frequency converters, electronic valves and other equipment, can be connected to the human cloud to achieve configuration monitoring.

Intelligent building monitoring

The M100 can control all kinds of solenoid valves, lighting equipment, access control, support edge collection of environment, energy and other information, and connect to the server through MQTT.

Selection Table

Model	USR-M100	USR-M100-ARD	USR-M300
Protocol	ModbusDLT645	-	Modbus,OPCUA,Bacnet,IEC645,*IEC104,*IEC61850
Edge commputing	300 data points	-	2000 data points
Second development	-	Arduino IDE Platform(C and python)	Node-red
Network	4G or WAN*1	Wifi,BLE,WAN*1	4G,1*WAN/LAN+L*LAN
VPN	-	-	PPTP, L2TP, *OpenVPN
IO expendable	DI ,DO,AI ,AO		

More applications

Environmental protection industry

Industrial acquisition

Storage tank

Cellular Router

5G/4G industrial secure cellular routers

USR-G805s
Dual SIM 4G Router

USR-G816
Global & Qualcomm 5G chipset

USR-G806s
Global Band & GNSS

USR-G806w
Wi-Fi and 4G adopt Qualcomm

COMING SOON

Network Management

Online remote networking function enables easy network construction and network management through SD-VPN technology. This technology solves the pain points of expensive broadband fees, complex VPN settings, and high technical thresholds required for traditional remote access.
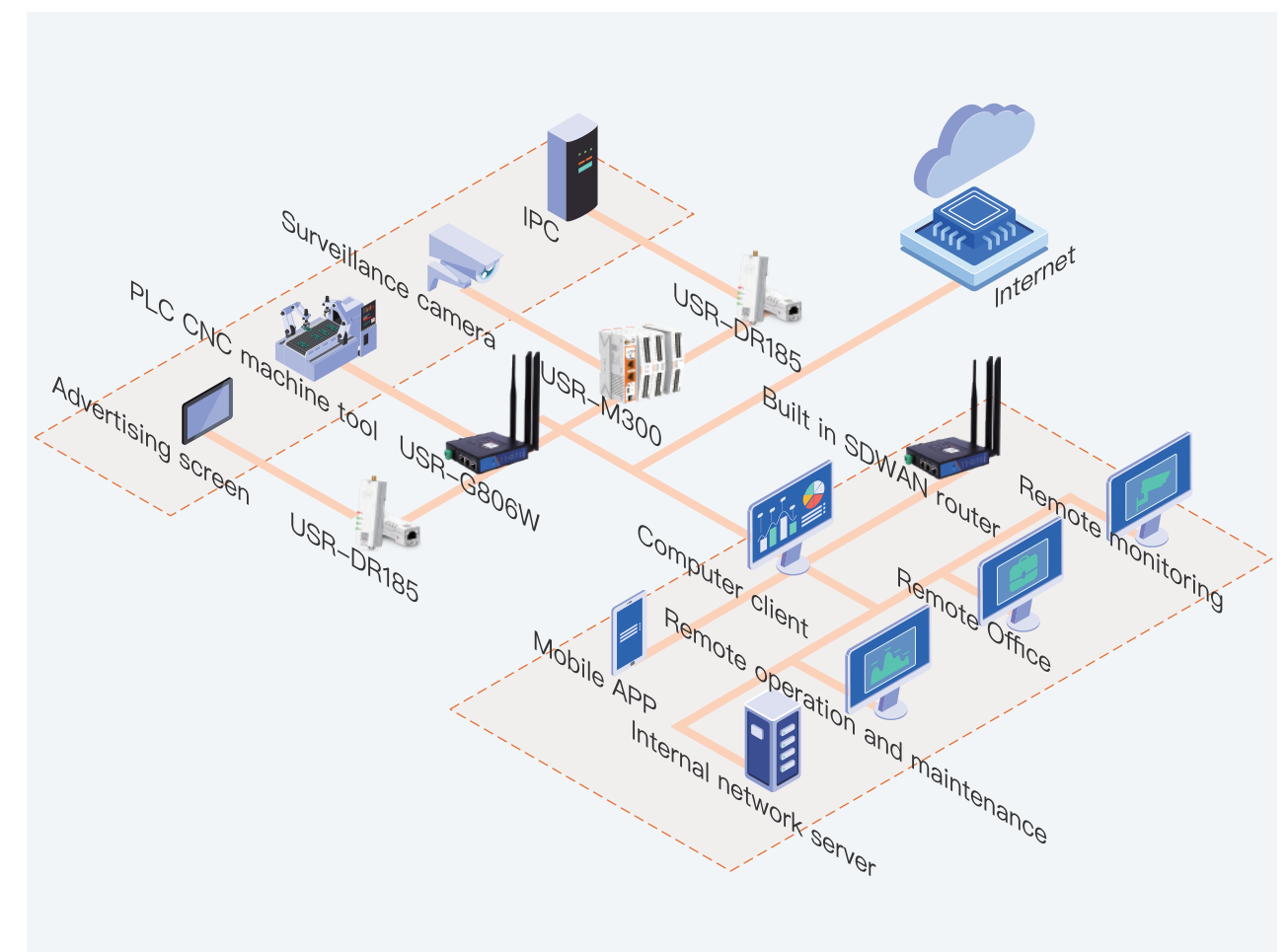
Applicable scene

Remote monitoring: Monitor facility operation status in real time around the clock.

Remote PLC upgrade: Update device operating systems regardless of geographic location.

Remote debugging of industrial computers and instruments: Avoid on-site visits and debug directly from the remote end.

Flexible remote working: Create an off-site working environment for corporate employees.
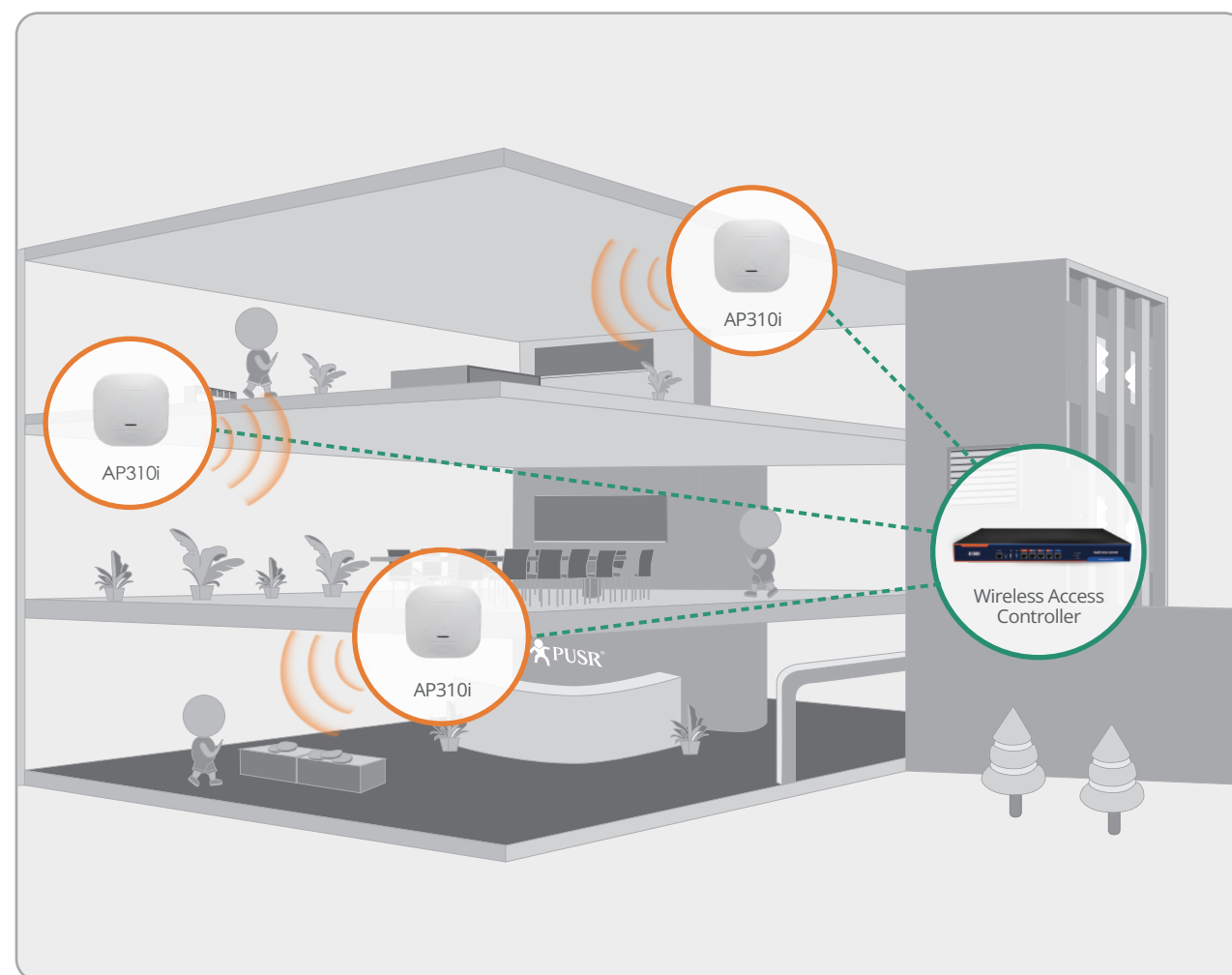
Selection Table

Model	G805s	G806s	G806w	G816
cellular	cat4	cat4	cat4	cat4 & 5G
WiFi	WiFi4	WiFi4	WiFi4	WiFi4 & WiFi5
GNSS	-	✓	-	-
Ethernet LAN port	4	1	2	3
Ethernet WAN port	1	1（WAN/LAN）	1（WAN/LAN）	1（WAN/LAN）
SIM card slot	2×4FF	1×2FF	1×4FF	2×2FF

Industrial IoT Gateways Ranked First in China by Online Sales for Seven Consecutive Years

Data from China's Industrial IoT Gateways Market Research in 2023 by Frost & Sullivan

AC Controller/ Wireless AP

New Gigabit Wi-Fi options for enterprise, SMB, SOHO

As offices become increasingly mobile, network connectivity needs to keep up with work demands. The common AP+AC networking scheme is designed to solve the problems of large number of aps and high management cost in a large area, and the situation that mobile terminals cannot roam due to the independent work of aps, so as to achieve seamless network coverage and wireless roaming of terminals, and improve user experience.

AP310i

AP310i

AP310i

Wireless Access Controller

AP310i
Qualcomm WiFi6 AX3000
WAN(PoE in)+LAN

AP520X
Qualcomm WiFi6 AX3000
1*1G WAN(PoE in)

AC1000
1U Rack Mount
Manage 200PCS Wireless AP

AC200
PoE Out
Manage 200PCS Wireless AP

The commercial wireless AP series has also derived the products that support 5G NR, which are equipped with a 5G Sub-6GHz M.2 module designed for IoT/eMBB applications.

AP310i

- Dual band WiFi 6, AX3000
  Up to 256 users supported
- Qualcomm solution, stable performance
- 1*1G Ethernet port + 1*2.5G Ethernet port
- High power up to 24dBm, wider coverage

AC1000

- Manage up to 200 Access Points
- 1*Gigabit WAN+4*Gigabit LAN
- 1*USB 2.0 + 1*USB 3.0
- Desktop or 1U rack installation
- 802.11r Protocol, seamless roaming

Business building

Medical institution

Site energy mine networking

Smart terminal data transmission

Wireless bridge

Wireless bridge series is based on the Qualcomm core platform, with the high TX power and high sensitivity that come from the high-quality hardware.

ST508E

- Indoor version
- Up to 2km transmission distance
- IP-64 waterproof
- 4 priority queues
- 2kv surge Protection

ST515N

- Outdoor version
- DSCP Mode QoS
- IP-66 Waterproof
- Up to 5km transmission distance
- 2kv Surge Protection
- Engineering Grade

- Park video surveillance
- Construction tower crane
- Elevator video surveillance
- Forest fire prevention

Swarm Mesh Wireless Client

USR-FQ610 is a self-organizing ad-hoc network of autonomous mobile devices that can communicate among 1024 devices without a central controller.
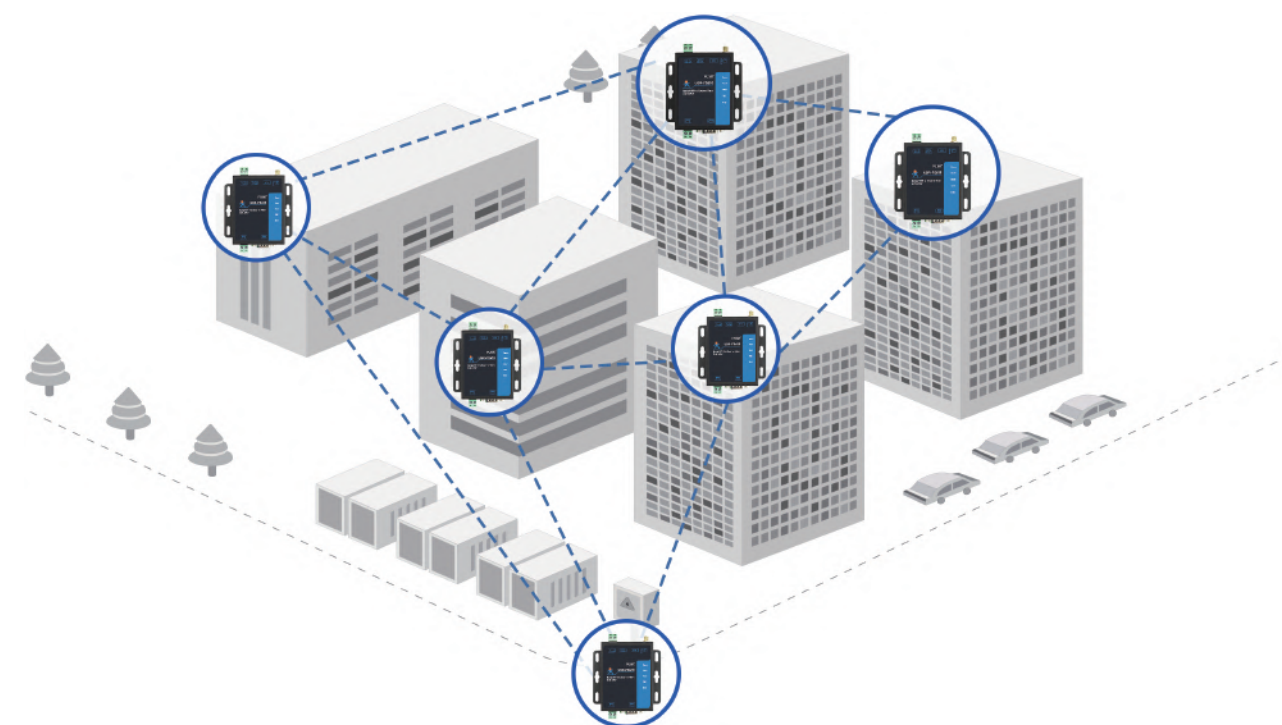
USR-FQ610

- Rapid Networking
- High-speed Data Transmission
- Automatic Relay

Application

Complex environmental communication

Factors such as limited resources and complex building structures restrict large buildings, multi-story basements, tunnels, and mines. Ground signals cannot be directly transmitted underground. The swarm mesh (ad hoc) network technology automatically relays wireless networking through portable terminals and introduces signals downward through multi-hop forwarding to quickly achieve ground and underground interoperability.

Business grade Switches

5/8 port Ethernet unmanaged switch

USR-SF/SG

- Unmanaged
- DC socket/terminal block
- Multi-scenario layer 2 switch
- 5/8 ports 10/100Mbps or 10/100/1000Mbps

⚡ **Weak current box equipment**

📷 **Camera for networking**

Switches / PoE Switches

SFP Gigabit optical port, Energy-efficient Ethernet, One-click VLAN S1210P is a 8-port gigabit PoE switch with the extra 1 gigabit Eth port and 1 SFP optical port for uplink.

USR-S1210P

- 8*Gigabit PoE Port+1*Gigabit Port+1*SPF Port
- Max. PoE 30W per Port by PSE
- VLAN isolation, preventing broadcast storm
- Metal shell, IP30 protection

▦ **Enterprise network expansion**

🖨 **Printer networking**

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Insutrial grade Switch

USR-ISG005

USR-ISG008P

USR-ISG016

USR-ISG008

Industrial Gigabit Ethernet Switch   USR-ISG Series

- · Plug and play, multi-protocol support
- · Full gigabit interface, large bandwidth
- · 5 ports, 8 ports, 16 ports optional
- · IP40 protection, FCC, CE, ROHS multiple certifications
- · DC12~52V wide voltage (PoE optional, voltage DC48~57V)
- · Ultra-low delay, up to 3us
- · Optical port optional (SPF socket reserved)

((•)) **Wireless Coverage**

品 **Electric Automation**

*Data from China's Industrial IoT Gateways Market Research in 2023 by Frost & Sullivan

Industrial Computer

USR-EG818

Specification

Hardware Architecture：ARM；CPU：A55；OS：ubuntu；Graphics：HDMI-4K

Ethernet：2*10/100Mbps RJ45

Wi-Fi（Reserve）：802.11 b/g/n，2.4GHz

USB：2*USB 3.0 Type A

CAN：1*CAN

Serial：2*RS232 + 2*RS485

I/O：2*DO + 4*DI + 4*AI（Voltage：0-10V，Current：4-20mA）

Status LED：POWER，WORK，DI，DO

Reserve Interfaces：I2C Extend、LVDS-1080P、eDP、MiPi

Camera：MIPI

Serial to Ethernet/WiFi——Serial to Wi-Fi6 Converter

Wi-Fi 6 industrial wireless device with high speed, wide connection, low delay, and high stabilit

USR-W660

- Dual Band Wi-Fi 6
- Switching time less than 100ms
- Gigabit Ports
- RS232/485
- Industrial-Grade Design

Application

Smart Factory Data Collection and Transmission Via Wi-Fi

Connect with the serial port/network port equipment in the factory, and upload the equipment operation data to the local monitoring platform or remote platform in real time; the staff can dynamically understand the operation status of the monitored equipment through the monitoring platform.

Remote Manage System

Wi-Fi6 Network

USR-W660
RS485/RS232/RJ45

Industrial Sensor   Robotic Arm   Industrial Camera