

Industrial IoT & Digital Products

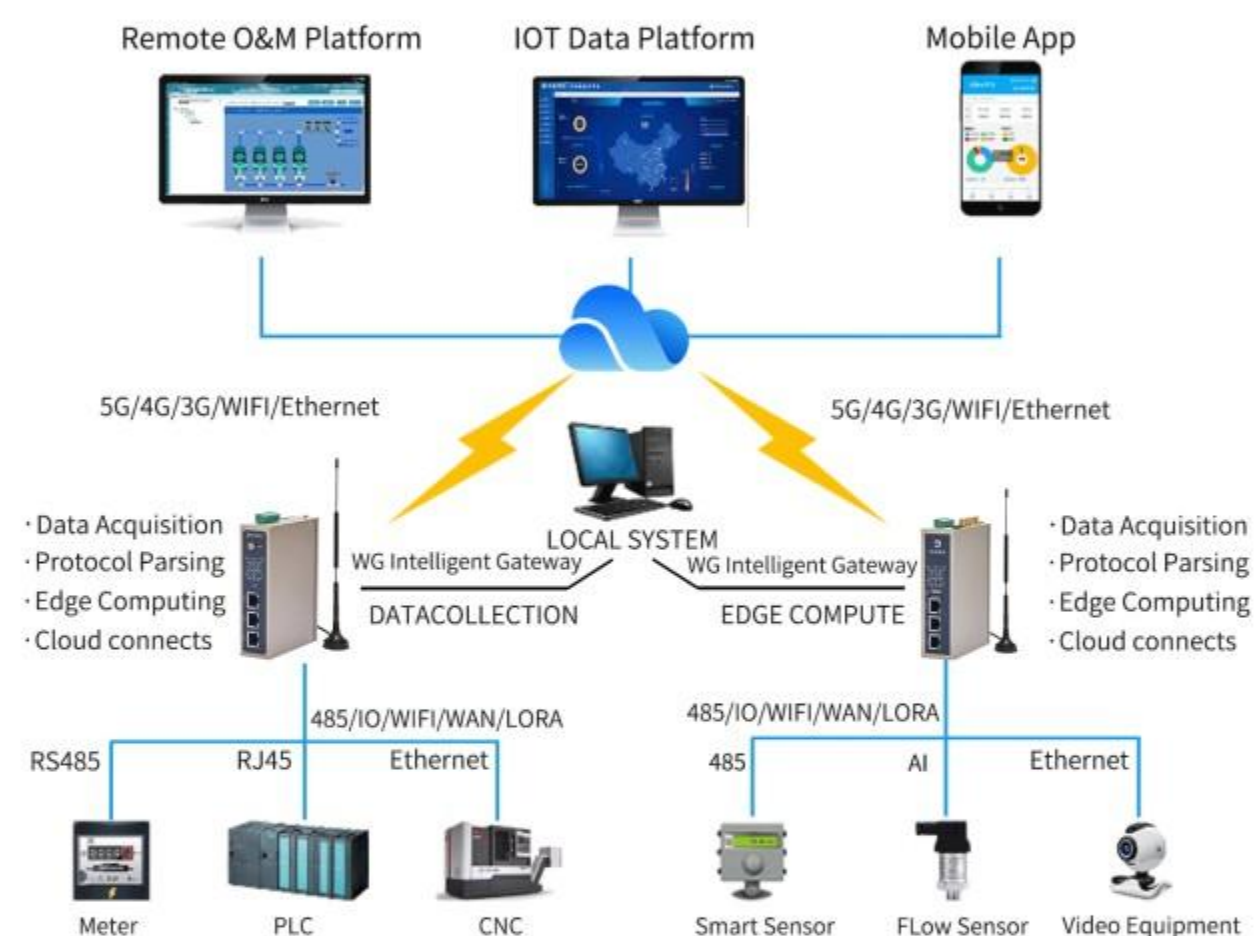
-Smart Data Acquisition Advanced Digital Solutions-



Industrial Intelligent Gateway | Data Acquisition, Edge Computing, Data Cloud Upload



WideIoT's Industrial Intelligent Gateways are critical edge nodes for both Industrial IoT (IIoT) systems and Industrial SCADA systems. It is capable of collecting data from a wide range of devices, including PLCs, CNCs, meters, sensors, robotic arms, environmental protection equipment, and energy devices. Following protocol conversion, edge computing, and data standardization, it integrates this data into various industrial cloud platforms and software, such as IoT Platform, SCADA, MES, and EMS.



Application Method

Connects to WideIoT Cloud Platform

Data Monitoring | Equipment O&M
Cloud Configuration | Data Analytics

Cloud Platform Development with APIs

Massive Connectivity | JSON Messaging
Bidirectional Control | Quick Development

Realize remote O&M of equipment

Gateway & Express Link Enable Remote
PLC Diagnostics & PLC OTA

Integration with Industrial Software

MES | EMS | EAM | WMS | SCADA...

Connect to public IoT platforms

Azure-IOT | AWS-IOT | Huawei-IOT | AliYUN-IOT...

Device Protocol Interconversion

OPC UA | ModbusTCP | MQTT | IEC104
IEC61850 | BACNET...

Gateway Classification

PLC Gateway

Analyze various PLCs data to Cloud/
SCADA (Siemens, Mitsubishi, Omron,
Schneider, Beckhoff...)

PLC Remote Gateway

Realize remote monitoring and
debugging of PLC, Remote diagnosis,
remote downloading of programs

CNC Gateway

Analyze various CNCs data to Cloud/
SCADA (FANUC, Mitsubishi, Siemens,
Mazak...)

Vehicle Gateway

Collects vehicles data to Cloud/
SCADA(engineering vehicles,
emergency power vehicles...)

Robot arm Gateway

Collect various robot data to Cloud/
SCADA(ABB, Fanuc, Yamaha, Estun,
kuka...)

Modbus Gateway

Collect Modbus RTU and Modbus TCP
data and convert them into MQTT to
transmit the data to Cloud/SCADA

BACNET Gateway

Support collecting BACNET IP and
converting BACNET MS/TP to MQTT
data to Cloud/SCADA

Energy Gateway

Acquires meter, PV, wind, storage,
and grid data to the Cloud/SCADA

Edge computing Gateway

Ample Computing Resources,
Open APIs, and Edge Algorithm
Deployment Support

Protocol Gateway

Supports converting various
protocols to MODBUS TCP, OPCUA,
BACNET, IEC104, IEC61850, etc

Hardware Selection



WG581

4G CAT1|CAT4|Redcap 5G|WIFI

Single-core CPU, 128MB RAM,
1*10/100Mbps Ethernet,
1*RS232/RS485 serial port



WG583

4G CAT1|CAT4|Redcap 5G|WIFI

Single-core CPU, 128MB RAM,
3*10/100Mbps Ethernet,
2*RS232/RS485 serial port



WG585

4G CAT1|CAT4|Redcap 5G|WIFI

Single-core CPU, 128MB RAM,
5*10/100Mbps Ethernet,
2*RS232/RS485 serial port



WG593

4G CAT1|CAT4|Redcap 5G|WIFI

Single-core CPU, 128MB RAM,
3*10/100Mbps Ethernet,
1*RS232/RS485 serial port
Multi-channel AI-AO-DI-DO



WG783

4G CAT4|5G|WIFI

Dual-core CPU, 256MB RAM,
3*10/100/1000Mbps Ethernet,
2*RS232/RS485 serial port



WG793

4G CAT4|5G|WIFI

Dual-core CPU, 256MB RAM,
3*10/100/1000Mbps Ethernet,
10*RS232/RS485 serial port

NAT Coupler | Enables cross-segment access and network isolation



- IP renaming
- Cross-Subnet Access
- Network Segmentation

The WideIoT NAT Coupler is a security isolation product designed for high-reliability production networks. It facilitates the integration of newly procured devices (e.g., PLCs, CNCs, DCS) by performing IP reassignment for seamless network access. It isolates broadcast and collision domains through network segmentation and enables bidirectional communication between devices across two different subnets. This solution is widely deployed for network isolation in smart factories, mines, oil wells, and other scenarios demanding high reliability.



Industrial 4G/5G Wireless Router | High-Speed, Reliable, and Easy-to-Use Connections



The WideIoT WR-Series Industrial Wireless Router enables robust IoT solutions with its 5G/4G, Wi-Fi, and Ethernet connectivity. It supports VPN tunneling to provide secure, reliable, and low-latency network access for large-scale device networks across diverse sectors like smart manufacturing, utilities, cities, and agriculture.



- 1 100M Ethernet port; Supports 5G Redcap, 4G CAT1/CAT4/CAT6, WiFi (AP/STA)

WR511



- 3 100M Ethernet ports; Supports 5G Redcap, 4G CAT1/CAT4/CAT6, WiFi (AP/STA)

WR513



- 5 100M Ethernet ports; Supports 5G Redcap, 4G CAT1/CAT4/CAT6, WiFi (AP/STA)

WR515



- 3 1000M Gbit Ethernet ports; Supports 5G SA/NSA, 4G CAT1/CAT4/CAT6, WiFi5 (STA/AP)

WR713

Industrial Switches | High-Performance, High-Speed Data Transmission



The WideIoT WS-Series Industrial Switches deliver high stability, reliability and security with easy maintenance. Featuring dual power and network redundancy, they are ideal for smart grids, rail transit, smart cities, safe city projects, new energy and intelligent manufacturing.



WS1005E-5T
Unmanaged Switch

- 5 100Mbps electrical ports
- Input: 12~48VDC or 24VAC;
- Op. Temp.: -40~75°C



WS1008E-8T
Unmanaged Switch

- 8 100Mbps electrical ports
- Input: 12~48VDC or 24VAC;
- Op. Temp.: -40~75°C



WS2010E-2GS-8T
Unmanaged Switch

- 8 10/100/1000Mbps Auto-Negotiation Ethernet Ports
- 2 1000M SFP Expansion Slots



WS2012M-4GS-8T
Managed Switch

- 8 10/100/1000M Auto-Neg Ethernet RJ45 Ports
- 4 1000M SFP Expansion Slots



WS2028E-4GS-24T
Managed Switch

- 24 10/100/1000Mbps adaptive Ethernet ports
- 4 1000M SFP expansion slots Input: DC12/24V, AC/DC85~265V;
- Operating temperature: -40°C~75°C;
- Wide-temperature option available; Fanless design

IOT Data Platform

Data Acquisition, Equipment Management, Data Visualization



- Device Data Access
- Equipment Remote O&M
- Equipment HMI Monitoring
- Data Reporting & Analytics

The WideIoT Industrial IoT Platform is a high-concurrency cloud platform for remote equipment management and data visualization. It is widely used for device configuration management, IoT data acquisition, operational maintenance, and universal HMI applications across industries including smart factories, equipment manufacturing, water utilities, Vehicle Management and environmental energy.

Vehicle Management Platform

Vehicle Management, Dispatch & Maintenance



- Vehicle Operation Monitoring
- Vehicle Location & Dispatch
- Vehicle Remote O&M
- Vehicle Data Analysis

WideIoT's Vehicle Management Platform collects and transmits vehicle data, uploading key info and location to the platform in real time for display, monitoring and analysis. It detects equipment status, tracks trajectories, alerts to anomalies—supporting operations in vehicle management and after-sales remote troubleshooting, reducing accident risks, and enabling full-lifecycle vehicle management and integrated management-operation-maintenance.

Industries Served



Smart Factory



Equipment Manufacturer



Wastewater Treatment



Steel & Metallurgy

Industry Projects



Environmental Monitoring



Mining & Oil Wells



Energy Management



Smart City

Equipment Remote O&M Platform

Remote O&M, Predictive Analytics, After-Sales Management



- Remote Equipment Mgmt
- Equipment Remote O&M
- PLC Program U/D
- Predictive Maintenance

The WideIoT Equipment Remote O&M Platform is a specialized system for distributed equipment maintenance. It establishes a secure data channel to remote industrial sites, enabling engineers to perform PLC remote maintenance, diagnostics, debugging, and program upload/download. This significantly reduces travel costs, improves work efficiency, and enhances both customer service and product quality. Widely used in equipment manufacturing and distributed projects.

Energy Management Platform (EMS)

Energy Monitoring & Conservation Platform



- Real-time Data Monitor
- Intelligent Data Analysis
- Energy-saving Control
- Energy Safety Management

WideIoT Energy Management Platform collects water, electricity, heat, gas, and new energy equipment (PV, wind power, energy storage, etc.) data from factories and parks. It enables supervision, monitoring, analysis, control, prediction, and reporting, realizing refined energy management. Empowering energy saving, carbon reduction, cost cutting, and efficiency boosting, it is widely used in factories, parks, communities, and more.

IOT Terminals | I/O Acquisition & Control, Serial Transparent Transmission, Data Cloud Upload

WideIoT's WD Series IoT Terminals are industrial wireless terminals supporting I/O acquisition & control, serial transparent transmission, and data parsing & cloud upload. It enables multi-channel DI, DO, AI, and AO data acquisition/control at industrial sites, supports serial data acquisition via Modbus RTU, DLT645, and CJ188, and allows data upload to the cloud via 4G networks and MQTT/TCP/UDP protocols.



WD140 Series

Serial Port:1 RS232/485
IO Port:2AI-1DI-1DO
Network:4G、WiFi
Functions: Data Acquisition, Data Transparent Transmission, Data Cloud Upload



WD240 Series

Serial Port:1 RS232/485
IO Port:4AI-8DI-4DO
Network:4G、WiFi
Functions: Data Acquisition, Data Transparent Transmission, Data Cloud Upload

Features



Extensive IO Interfaces

Multi-Channel Analog I/O (AI/AO)
Multi-Channel Digital I/O (DI/DO)
Counters & Timers with rapid pulse counting



Rich Network Interfaces

4G Version: CAT.1
WiFi Version: 2.4GHz STA Mode



Extensive Protocol Support

4G/WiFi Version: Supports MQTT、TCP、UDP、Modbus RTU、DLT645、CJ188 protocols.



Quick data migration to the cloud

Serial & I/O Data via MQTT to WideIoT Cloud or other Cloud platforms for monitoring and analytics. Open APIs enable rapid integration with customer cloud platforms.



Serial Passthrough

4G/WiFi Version: Enables bidirectional serial data passthrough via MQTT/TCP/UDP protocols.

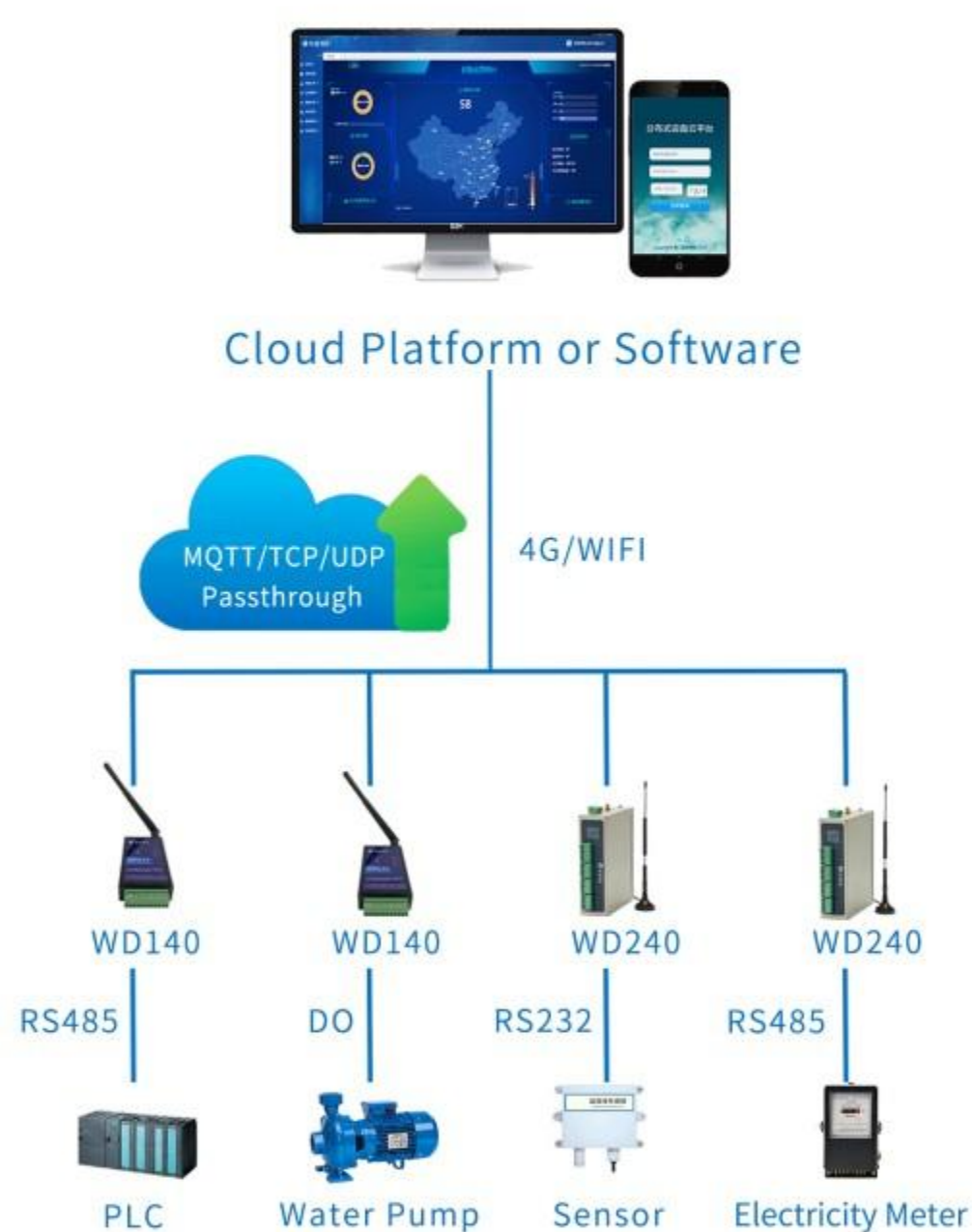


Industrial-Grade Reliability

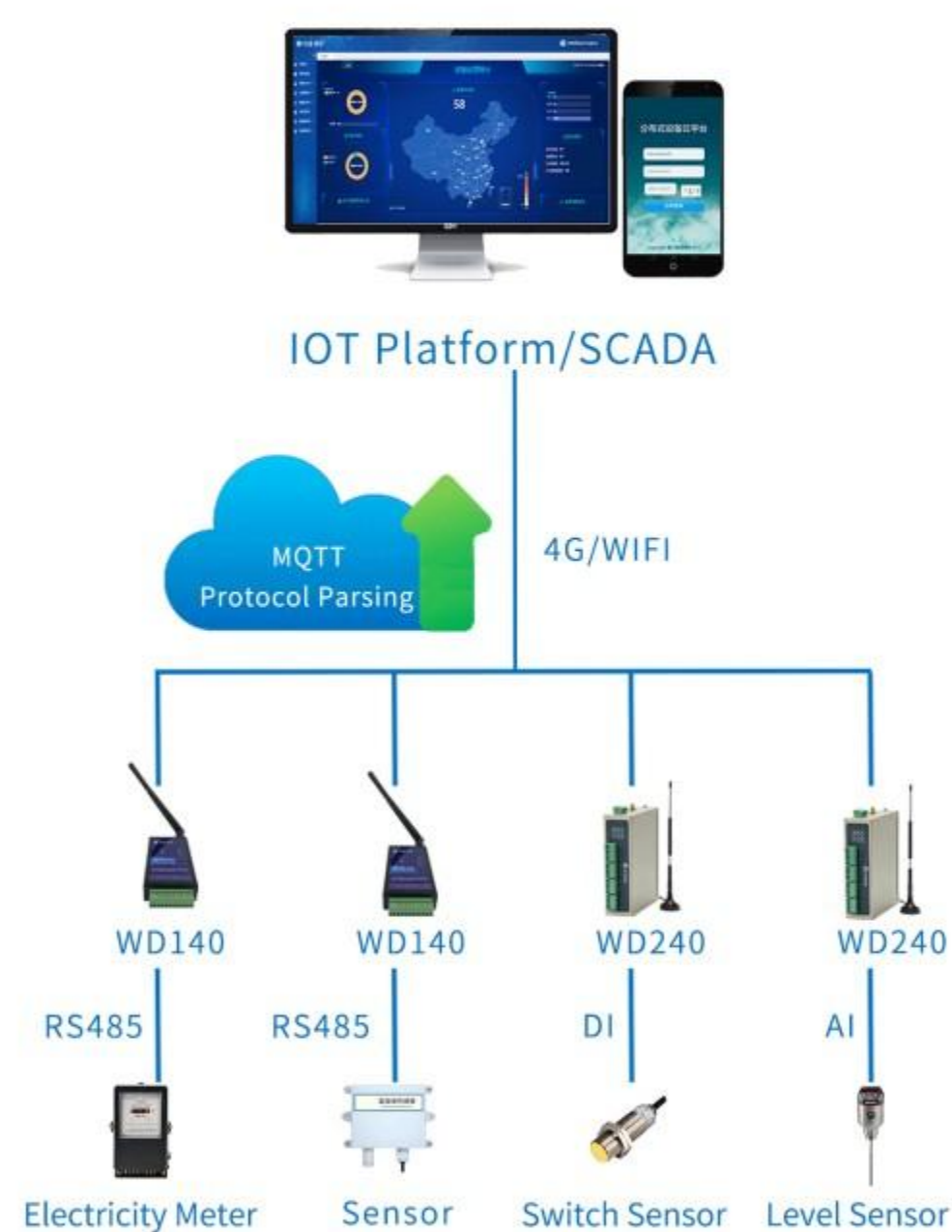
6-35V Wide Voltage, -40 to +85°C Operating Temperature
Isolated RS232/485 with 15KV ESD Protection
Opto-isolation, Over-current/voltage Protection, Watchdog

Application topology diagram

Transmits IO & Serial Data Device to Cloud via Passthrough



Parses & Transmits IO & Serial Data to Cloud



WideIoT | Digital Applications & Solutions

Founded in 2011 and headquartered in Xiamen, China, WideIoT is a professional provider of industrial IoT products and digital solutions. It focuses on smart factory digitalization, remote management of smart equipment, energy system visualization, and intelligent infrastructure operation. The company offers a comprehensive product portfolio, including industrial wireless routers, industrial ethernet switches, industrial intelligent gateways, iot Terminals, Industrial IO modules, industrial edge computers, and IoT data cloud platforms. As a national high-tech enterprise, WideIoT integrates R&D, production, sales, and service into a seamless operation.

Numerous Corporate Honors & Full Product Certifications



National High-Tech Enterprise



S-R-D-I Enterprises



Top 100 IoT Projects in China



ISO Certification



AAA-Level Credit Enterprise



Software Copyrights

Product Certifications

Patent Certificate

Superior Quality & Professional Service Winning Customer Trust



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WhatsApp