IAD200 Series

Industrial LTE Wi-Fi Modbus Router

Highlights

Reliable and Uninterrupted Transmission
The dual-SIM design supports mobile transmission backup and ensures the stability and reliability of the network through the failover management mechanism of multiple Internet interfaces. The communication between the remote device and the monitoring center is uninterrupted, maximizing uptime.

Information Security Protection
Supports TACACS+ to provide independent authentication, authorization and accounting services, and supports IPSec to establish secure network connection communications to protect your data access.

Flexible Application with Multiple Interfaces
Can be connected to Ethernet, RS485, RS232, DI, and Relay interfaces, and uses the common communication protocol Modbus TCP to communicate with peripheral devices in various field applications.

Flexible Wireless Network
Supports IEEE 802.11a/b/g/n/ac, can configure Wi-Fi as a WAN or access point, and provides Wi-Fi security WPA2-PSK (AES).

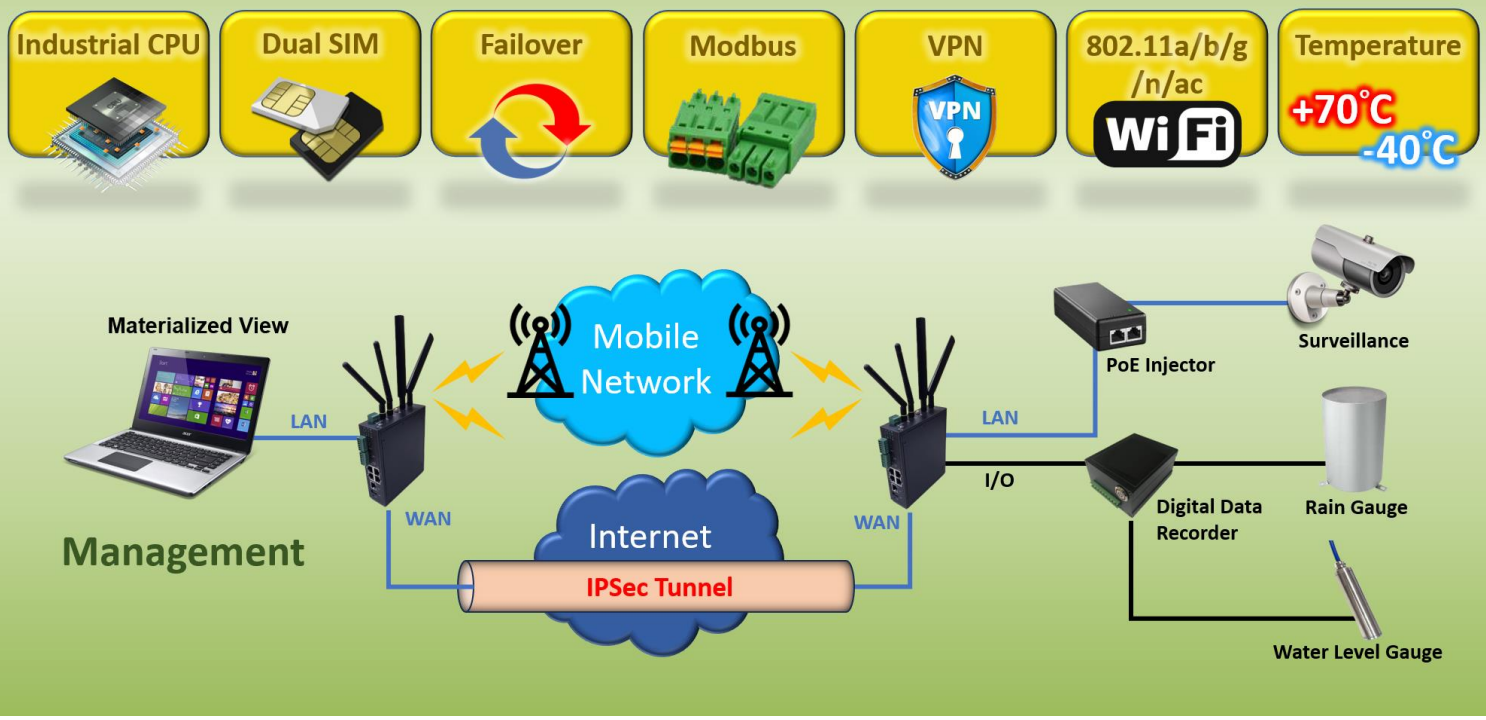
Industrial Grade Design
The IP30 fanless metal casing design supports harsh operating temperatures from -40°C to 70°C, and provides a backup mechanism for dual DC power inputs.

Easy Remote Management
Provides mass configuration, device management, and firmware upgrades through TFTP/HTTP to quickly maintain and manage remote application devices.

IAD200 is a highly-reliable and secure gateway combines 802.11ac and 4G LTE technologies to provide flexible wireless network connectivity. It supports with five Gigabit Ethernet ports (4 LAN and 1 WAN) and RS232/ RS485 interface for Modbus application. DIN-Rail mounting, wide operating temperature range from -40°C to 70°C, and IP30 housing, the IAD200 is a convenient yet reliable solution for any industrial wireless application.

IAD200 allows users to implement encrypted VPN tunnels and other basic Wi-Fi routing capabilities. With IEEE 802.11ac dual band radio it can operate either 5GHz or 2.4GHz bands. IAD200 adapts MIMO technology with smart antenna transmission and reception for 2T2R. It also supports AP/ Client modes to diverse for most of wireless application.

The LTE CAT4 up to 150Mbps for downlink and 50Mbps for uplink data transfer. It also supports multi-band connectivity including LTE-FDD/ LTE-TDD/ HSPA+/ UMTS/ EDGE/ GPRS/ GSM for a wide range of applications and machine to machine communication.



Specification

Model	
IAD200-45M	4G LTE/ Wi-Fi 5/ Modbus

Physical Interface	
LAN port	4 x 10/100/1000BASE-T RJ45, auto-negotiation, auto MDI/MDI-X
WAN port	1 x 10/100/1000BASE-T RJ45, auto-negotiation, auto MDI/MDI-X
Serial port	1 x RS232 1 x RS485
I/O port	2 x DI (isolated) 1 x Relay

WLAN Interface	
Standard	IEEE 802.11a/b/g/n/ac
Mode	AP, Client mode
Encryption	WPA2-PSK (AES)
Antenna connector	2 x PR-SMA connectors, Wi-Fi interface, 50ohm

Cellular Interface	
Frequency (SA)	LTE CAT4 (Uplink up to 50Mbps, Downlink up to 150Mbps) LTE-FDD: B1/ B2/ B3/ B4/ B5/ B7/ B8/ B28/ B66 WCDMA: B1/ B2/ B5/ B8 GSM/ GPRS/ EDGE: 850/ 900/ 1800/ 1900MHz GNSS support (option)
SIM slot	2 x nano SIM
Antenna connector	2 x SMA connectors, Cellular interface, 50ohm 1 x SMA connector, GNSS interface, 50ohm

Network Functions	
Protocol	IPv4
WAN connection	DHCP client, static IP
Provision	TFTP/ HTTP
Dynamic routing	RIPv1/v2
Modbus	Modbus TCP Transparent (RTU over TCP)

Management Functions

Switch management interface	Console/ Telnet CLI Web management SSHv2 secure access
Firmware upgrade	TFTP/ HTTP
RTC	Support SNTP and embedded RTC
Diagnostic	Support system log
Configuration	Backup and restore
LED indicator	PWR, SYS, wireless, Wi-Fi, SIM, WAN/ LAN-SPD/ LNK
Monitoring	RMON counter

Security Features

VPN	IPSec
NAT function	Virtual servers/ Port forward Demilitarized Zone (DMZ)
Firewall	IP filter URL filter MAC filter
Transmission	HTTPS/ TLS/ 1.2/ 1.3
AAA	TACACS+
Access level	Three access levels for administrator, operator, and user privilege
Anti-camouflage attack	Lock IP and delay login

Power

Input	3.5mm Terminal block with external DC dual input
Power range	9 ~ 48V DC
Power consumption	Less than 10W

Environmental Limits

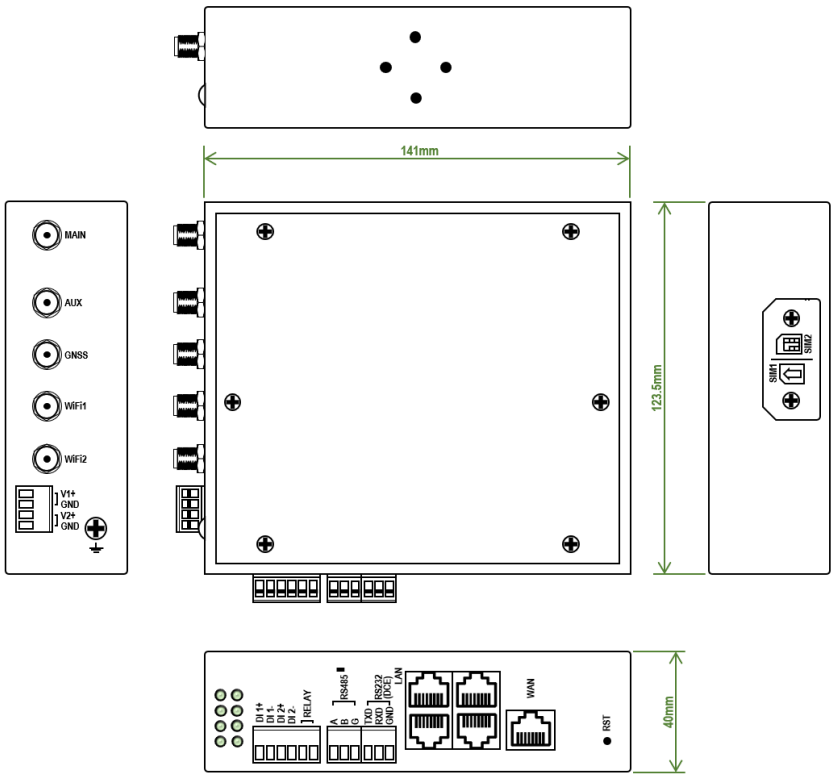
Operation	-40°C ~ 70°C (-40 to 158°F)
Storage	-40°C ~ 85°C (-40 to 185°F)
Relative humidity	5 ~ 95% (non-condensing)

Regulatory

CE	EN 55032 EN 55035
EMC	EN 301 489-1/ -17
Cellular	EN 301 908-1
WLAN	EN 300 328 EN 301 893

Mechanical

Dimensions	W 40mm x D 123.5mm x H 141mm
Casing	IP30 iron case DIN-Rail design



3F., No.108, Ruiguang Rd.,
Neihu Dist., Taipei City 114,
Taiwan
TEL: 886-2-26583000
FAX: 886-2-27938000
E-mail: sales@tainet.net

Features

- Supports 4G LTE and HSPA+ network certification of major global telecom operators
- Applied to various types of IoT Modbus TCP communication integration
- Can be connected to Ethernet, RS485, RS232, DI, Relay interface
- Dual Nano-SIM LTE modules support fault recovery function
- Supports IEEE 802.11a/b/g/n/ac 2T2R suitable for most wireless environments
- 5 Gigabit network ports, including 4 LAN ports and 1 WAN port
- Equipped with VPN, supports IPSec tunnel access, establishing secure network connection communication
- TACACS+ provides authentication, authorization and accounting services
- NAT virtual server, port forwarding, compatible with most IP networks
- Equipped with firewall and supports HTTPS/ TLS/ 1.2/ 1.3 to prevent hacker intrusion
- Provides mass configuration, device management, and firmware upgrades via TFTP/ HTTP
- Switch management interface, Console/ Telnet CLI, Web switch management, SSHv2 secure access
- Dual power input backup, DC 9 ~ 48V, power consumption less than 10W
- IP30 fanless metal enclosure supports harsh operating temperatures from -40°C to 70°C