

IEG-3010 Series

2-port 10/100 RJ45, 2-port RS-232/RS-422/RS-485, Wi-Fi/4G LTE module, Industrial IoT Gateway

Description

IEG-3010 Series are compact industrial IoT gateway, with 2 10/100Base-TX Ethernet ports, 2 serial ports, wireless (Wi-Fi) connection and 4G LTE module (2 Micro SIM slots) for the wireless application of preference. It helps operating engineers to monitor all factory stages even from wireless devices and predict production failure in advance.

IEG-3010 Series permits different protocol devices to coexist at an Ethernet-based interface and data protection is assured with its VPN functions. It supports MQTT and Modbus RTU to TCP protocols to transmit the data from sensors to the SCADA server through the Ethernet network. This way, non-Ethernet base PLCs, sensors, factory machines and wireless devices interact in an industrial Ethernet network for automation.



Features Highlight

MQTT messaging protocol support

MQTT uses publish/subscribe operations to exchange data between clients and the server. Its small size, minimized data packets and ease of implementation make the protocol ideal for the Industrial Internet of Things.

Modbus RTU to Modbus TCP

IEG-3010 Series has 2 serial ports to connect to the Modbus serial devices and 2 Ethernet ports or Wi-Fi to connect to the SCADA supervisor. It converts from serial to TCP/IP protocol to communicate serial devices and the SCADA system.

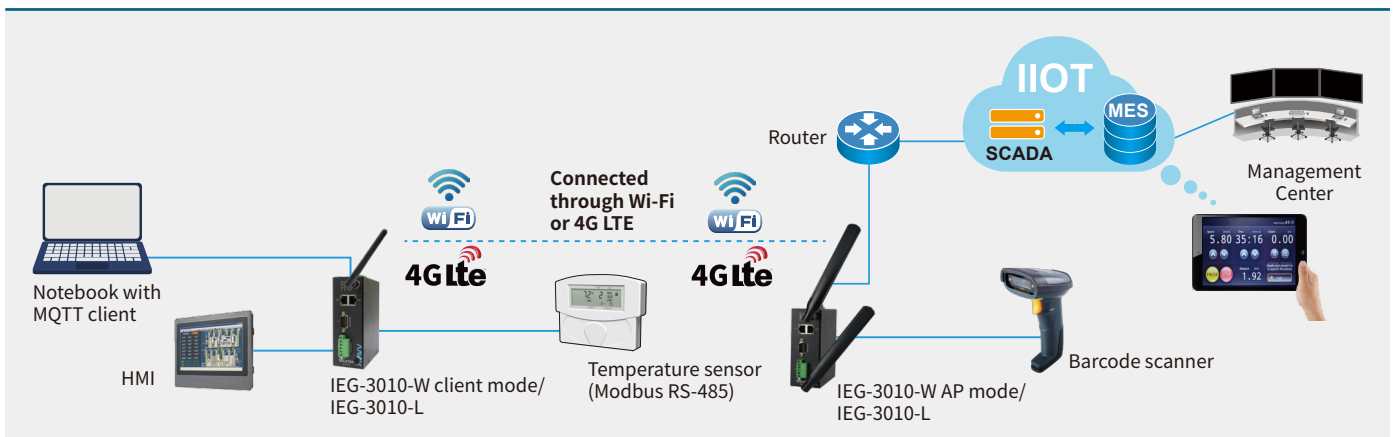
Communication through Wi-Fi connection

IEG-3010 Series supports 2.4 GHz Wi-Fi wireless band connection, and it can operate in AP mode or client mode or AP+client modes. IEG-3010 Series also supports SMA connectors to have external antennas connection flexibility.

Secure and Easy-to-use VPN Connection

Capable of creating a secure VPN (Virtual Private Network), IEG-3010 Series is "VPN client" and can create the VPN tunnel with "VPN server" (Cloud). Using IEG-3010 Series, you can instantly access your office resources through a secure VPN connection.

Applications



Specifications

| Standards | | |
|----------------------------------|---|--|
| IEEE 802.3 | 10BASE-T | |
| IEEE 802.3u | 100BASE-TX | |
| IEEE 802.3 | Nway Auto-negotiation | |
| IEEE 802.3x | Flow Control | |
| IEEE 802.1AB | LLDP | |
| Hardware Configuration | | |
| Ethernet Interface | 2 x LAN 10/100BASE-TX RJ45 ports | |
| Serial Interface | 2 x (RS-232/RS-422/RS-485) | |
| | Connector type: terminal block (1 x 5 pins)+ 1 x DB9 | |
| | 1 x RS-232: (TxD, RxD, GND) | |
| | 1x RS-422/RS-485: (T+,T-,R+,R-), (D+, D-), GND | |
| | Baud rate: 300bps~460kbps | |
| | Optical Isolation: 3KV ESD Protection: 15KV Surge Protection: 6KV Over Current Protection: Yes | |
| Wireless - Wi-Fi | SMA Connectors: 1 x 2dBi 1T1R, 802.11b/g/n | |
| Internal Module Interface | 1 x Mini PCIe for LTE | |
| Wireless - LTE* | SMA Connectors: 2 x 4dBi 4G LTE: Yes SIM card number: 2 SIM card type: Micro SIM | |
| | Alarm Relay Contact | 24VDC, 1A |
| | Grounding Screw | Yes |
| Reset Button | System reboot:5~10 seconds Factory default: >10 seconds | |
| Watch Dog | Yes | |
| Software Features | | |
| Network Protocol | TCP, ICMP, DHCP, HTTP, HTTPS, TFTP, Telnet | |
| Serial Port | Serial Port Protocol: TCP client, TCP server, Modbus RTU to Modbus TCP, Modbus TCP to Modbus RTU | |
| | Software selectable for RS-232/RS-422/RS-485 mode | |
| | Baud Rate Setting: 300~460kbps | |
| | Parity: None, Odd, Even | |
| | Data Bits: 5,6,7,8 (RS-232) | |
| | Stop Bits: 1,2 (RS-232) | |
| | Flow Control: None,(RS-232) | |
| | Software termination configuration of RS-485 (enable/disable) | |
| Wireless (Wi-Fi) | WiFi Mode: AP mode / Client mode (Software Configurable) | |
| | Wi-Fi Security: Encryption - Enable/Disable,WPA/WPA2, WPA-PSK, Hidden SSID, Channel setting | |
| | WiFi Standard Setting: IEEE 802.11b, IEEE 802.11g, IEEE 802.11n Auto | |
| | VPN | OpenVPN, VPN Interface Select (Ethernet (LAN,WiFi)/ LTE) |
| Data Acquisition | MQTT client, MQTT Broker | |
| NAT | NAT supports LAN port and WAN port. WiFi and Ethernet 1 are always LAN ports. If user did not configuration any WAN interface, the working behavior is same as now. Port forwarding function. DHCP server and default gateway when NAT function enable. | |

| Management | IP Address: Management IP address/subnet mask, Default Gateway, DHCP Client, IPv4 Time: SNTP Management Interface: HTTP, Telnet, SSH, HTTPS Firmware upgrade: HTTP, HTTPS Configuration file: Backup / Restore |
|------------------------------|---|
| Power | |
| Power | Connector type: Terminal Block Input voltage: 9~48VDC Dual power Input Support |
| Power Consumption | System: <6W (without LTE module) |
| LED Panel | PWR,RPS, ALM, Wireless, 100, LNK/ACT |
| Mechanical and Environment | |
| Housing | Metal, IP30 |
| Mounting | DIN Rail |
| Operating Temperature | -40°C~75°C (-40°F~167°F) |
| Storage Temperature | -40°C~85°C (-40°F~185°F) |
| Operating Humidity | 5~95% RH (non-condensing) |
| Storage Humidity | 5~95% RH (non-condensing) |
| Weight | 585g (without Antenna) |
| Dimensions (WxDxH) | 50x106x136mm (1.97 x 4.17 x 5.35 in) |
| Certifications | |
| EMC | FCC Part 15, EN 55022 (2006/A1: 2007) Class A IEC 61000-4-2(ESD) Level 3, IEC 61000-4-3 (RS) Level 3 IEC 61000-4-4 (EFT) Level 3, IEC 61000-4-5 (Surge) Level 3 IEC 61000-4-6 (CS) Level 3, IEC 61000-4-8 Level 3 |
| Radio | EN300 328 EN301 893 EN301 489 |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-31 |
| Vibration | IEC60068-2-6 |
| Ordering Information | |
| IEG-3010-L | Industrial IoT Gateway With 2 x 10/100 RJ45 & 2 x RS-232/RS-422/RS-485, LTE PCIe |
| IEG-3010-W | Industrial IoT Gateway With 2 x 10/100 RJ45 & 2 x RS-232/RS-422/RS-485, Wi-Fi |
| Option Accessories | |
| LTE Module - AT&T | LTE Module for IIoT Gateway, AT&T |
| LTE Module - Verizon | LTE Module for IIoT Gateway, Verizon |
| LTE Module - AU | LTE Module for IIoT Gateway, ANZ, Taiwan, Brazil |
| LTE Module - J | LTE Module for IIoT Gateway, Japan |
| LTE Module - EU | LTE Module for IIoT Gateway, Europe, Korea, Thailand |
| LTE Module - G | LTE Module for IIoT Gateway, Global (Verizon Pending) |

*Specifications subject to change without notice.

Dimension

