

# IEG-3024 Series

2-port 10/100 RJ45, 4-port DI/4-port AI,  
Wi-Fi, 4G LTE PCIe, Industrial IoT Gateway

## Description

IEG-3024 Series are mini-size industrial IoT gateway, with 2 10/100Base-TX Ethernet ports, 4 Digital Input & 4 Analog Input ports, wireless (Wi-Fi) connection or 4G LTE miniPCI-e connector type (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-3024 Series permits different protocol devices to coexist at an Ethernet-based interface and data protection is assured with its VPN functions. It supports network address translation (NAT) to enable instances in a private subnet to connect to multiple devices with the same feature function. It supports MQTT protocols to transmit the data from field devices, sensors to the SCADA server through the Ethernet network. This way, PLCs, sensors, factory machines, and wireless devices interact in industrial Ethernet cross-network applications 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.

### Communication through Wi-Fi connection

IEG-3024 supports 2.4 GHz Wi-Fi wireless band connection, and it can operate in AP mode or client mode or AP+client modes. IEG-3024 also supports SMA connectors to have external antennas connection flexibility.

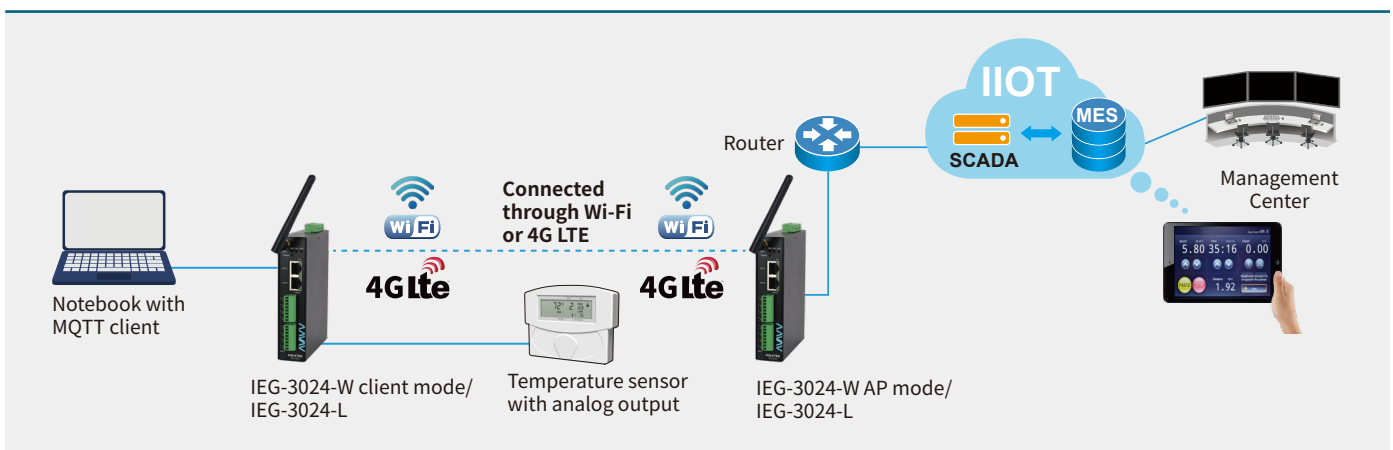
### Secure and Easy-to-use VPN Connection

Capable of creating a secure VPN (Virtual Private Network), IEG-3024 is "VPN client" and can create the VPN tunnel with "VPN server" (Cloud). Using IEG-3024, you can instantly access your office resources through a secure VPN connection.

### Digital Input and Analog Input

It has 4 DI and 4 AI input ports to receive analog inputs and digital inputs. The analog input type (Voltage or Current) can be selected using DIP switch.

## 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 802.3af	Power over Ethernet
Interface	
Ethernet Interface	2 x LAN 10/100BASE-TX RJ45 ports
Wireless - Wi-Fi	SMA Connector: 1 x 2dBi Wi-Fi (1T/1R): 802.11 b/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
Digital Input	4 x pairs, Wet Contact Voltage level : On (10V~50VDC), Off (4VDC max) Input Impedance: 10k ohm Overcurrent Protection: 7mA@70VDC
Alarm Relay output	24VDC, 1A
Analog Input	4 x pairs Contact Parameters Voltage : ±5VDC, ±10VDC, 0~5VDC, 0~10VDC Current: +4 ~ +20 mA Resolution: 16bit Accuracy: 0.1% FSR Sampling rate: 10Hz Input Impedance: Voltage: 1M ohm Overvoltage protection ±20 VDC
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 OpenVPN, VPN Interface Select (Ethernet (LAN,WiFi))
VPN	
Wireless (Wi-Fi)	<b>Wi-Fi Mode:</b> AP mode / Client mode (Software Configurable) <b>Wi-Fi Security:</b> Encryption - Enable/Disable,WPA/WPA2 <b>Wi-Fi Standard Setting:</b> IEEE 802.11b, IEEE 802.11g, IEEE 802.11n Auto WPA-PSK, Hidden SSID, Channel setting
Data Acquisition	MQTT client, MQTT Broker
Management	<b>IP Address:</b> Management IP address/subnet mask, Default Gateway, DHCP Client, IPv4 <b>Time:</b> SNTP <b>Management Interface:</b> HTTP, Telnet, SSH, HTTPS <b>Firmware upgrade:</b> HTTP, HTTPS <b>Configuration file:</b> Backup / Restore
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.

Software Features	
Redundant (Wireless / Ethernet)	Enable/Disable User can configure (Ethernet 2, LTE) as WAN interface. Ethernet 2 and LTE can be redundancy which is same current VPN redundant behaviors.
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	515g (without Antenna)
Dimensions (WxDxH)	31 x 105 x 136mm (1.2 x 4.13 x 5.35 in) (with AI/DI type)
Certifications	
Radio	EN300 328, EN301 489 (Under processing)
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
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Free Fall	IEC60068-2-31
Ordering Information	
IEG-3024-L	Industrial IoT Gateway With 2 x 10/100 RJ45 & 4 x DI/ 4 x AI, LTE PCIe
IEG-3024-W	Industrial IoT Gateway With 2 x 10/100 RJ45 & 4 x DI/4 x AI, 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

