EW50 Series

Industrial LTE Cellular Gateway

Stay Connected 24-7, Reliable High-Speed Communications

EtherWAN

4G LTE

Dual SIM

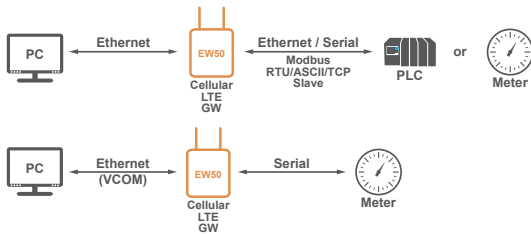**Modbus**

IPv6

Overview

The EW50 is an intelligent industrial grade gateway designed for critical infrastructure and industrial applications. It provides reliable and secure connectivity designed for harsh environments, giving operations and IT real-time awareness with remote monitoring. Moreover, it delivers best-in-class multi-path connectivity with Wireless, Ethernet, serial, and digital I/O to satisfy most applications. Global LTE options make it easy to get connected.

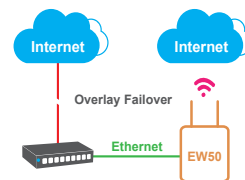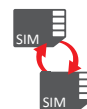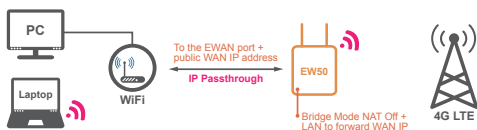EtherWAN — "When Connectivity is Crucial."

Spotlight

- **Flexible Configurations with Reliable Connectivity**
  - ◦ Ethernet, serial, DI/DO and Modbus bridging for connecting diverse field assets
  - ◦ Ideal for M2M and industrial IoT applications

- **Reliable and Uninterrupted Connection**
  - ◦ Equipped with dual SIM cards for failover
  - ◦ Failover management for network reliability and uninterrupted uptime
  - ◦ Always online 4G LTE internet connection/IP Passthrough Mode

- **Comprehensive Data Security**
  - ◦ IPSec, OpenVPN, PPTP, and L2TP VPN support up to 16 concurrent tunnels with max 70Mbps throughput (IPSec)

- **Rugged Industrial Design**
  - ◦ Features metal housing with fan-less cooling, IP30
  - ◦ Supports operating temperature from -30 to 70°C (-22 to 158°F)

Features

- Global HSPA+ and 4G LTE support, and certified for the world's major carrier networks
- Ethernet, serial, DI/DO and Modbus bridging for connection of diverse field assets
- Equipped with a dual Micro-SIM LTE module with failover function
- 10/100/1000BASE-TX Ethernet port with tag based and port based VLANs for easy control of groups and traffic
- IPSec, OpenVPN, PPTP, and L2TP VPN support for up to 16 concurrent tunnels with max 70Mbps throughput (IPSec)
- Firewall with SPI and IPS to prevent intrusion
- SNMP and Telnet CLI for system management

Frequency Bands Region Code

| Sku Code | 4G LTE | | 3G | 2G | Region |
	FDD LTE	TDD LTE	WCDMA	GSM/EDGE	
TA	B1(2100)/3(1800)/ 4(AWS)/5(850)/ 7(2600)/8(900)/ 28(700 APT)	B40(2300)	B1(2100)/2(1900)/5(850)/ 8(900)	B2(1900)/3(1800)/ 5(850)/8(900)	**Taiwan, Australia**
EUS	B1(2100) / 3(1800) / 5(850)/ 7(2600) / 8(900) / 20(800)	B38(TD 2600)/ 40(TDV 2300)/ 41(TD 2500)	B1/B5/B8	B3(1800)/8(900)	**EU, Singapore, Malaysia, Vietnam, Thailand, Turkey, Philippines, India, Indonesia, South Korea**
JP	B1(2100)/B3(1800)/ B8(900)/B18(800 Lower)/ B19(800 Upper)/B26	B41(TD 2500)	B1(2100)/6(UMTS only)/ 8(900)/19(800 Upper)	–	**Japan**

Hardware Specifications

Cellular Interface

Standards
- Cellular Frequency Bands: (Please check Frequency Band Regional Codes)
- LTE Cat. 4: FDD-LTE, TDD-LTE, Transfer rate (max): LTE FDD: 150Mbps down; 50Mbps up LTE TDD: 130Mbps down; 35Mbps up
- 3G: WCDMA, Transfer rate (max): 42Mbps down; 5.76Mbps up
- 2G: GSM/EDGE, Edge Transfer rate (max): 236.8Kbps down & up

Antenna connector
- 2 x SMA Female

SIM Slot
- 2

Ethernet

Standards
- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX/100BASE-FX
- IEEE 802.3ab 1000BASE-T

Ports
- 2 x RJ45 GE

Physical Layer
- 10/100/1000BASE-T

Serial

Ports
- 2 x RS-232/RS-485

I/O

DI/DO
- 1 x Digital In ("Logic 0": 0-2V, "Logic 1": 5-30V) 1 x Digital Out (Relay Mode, up to 30V/1A)

USB

Standards
- USB 2.0

Ports
- 1 x USB Type A

Micro SD

Capacity
- Max. Storage of 64GB

Functions

VLAN
- Port-based, Tag-based VLAN

Port Forwarding
- Virtual Server/Computer (1-1), DMZ Host, PPTP/L2TP/IPSec Pass-through

Routing
- Static, Dynamic: RIP1/RIP2, OSPF, BGP

VPN
- IPSec, OpenVPN, PPTP, L2TP, GRE

Firewall
- SPI Firewall with Stealth Mode, IPS

Event Engine/Event Handling
- Managing/Notifying Events: DI, DO, Modbus, SMS, Syslog, SNMP Trap, Email Alert, Reboot

Cloud Development Platform

- Support Microsoft Azure

Field Communication

Virtual COM
- RFC2217, TCP Client, TCP Server, UDP

Modbus
- Gateway for Modbus TCP, Modbus RTU/ASCII Master/Slave Access
- Slave for Device Status/Information Access

Data Logging
- Sniffer, Off-line/Full-time Proxy, Mixed modes

Data Interchange
- MQTT Broker, MQTT Client

Power

Input
- DC 9-36V

Power consumption
- 7.0W Max.

Mechanical

Dimension
- 31 x 99 x 130.6mm (w/o mounting brackets)

Weight
- 0.9Kg (1.98lb)

Installation
- DIN-Rail

Environment

Operating Temperature
- -30 to 70°C (-22 to 158°F)

Storage Temperature
- -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity
- 5% to 95% (non-condensing)

Regulatory Approvals

Safety

EN 60950-1

EN 62368-1: 2014

Emissions/Immunity

EW50-TA FCC/NCC/RCM

EW50-EUS FCC/CE/NBTC/NTC/KC*/SDPPI**/TDRA

EW50-JP VCCI/JATE

Note:
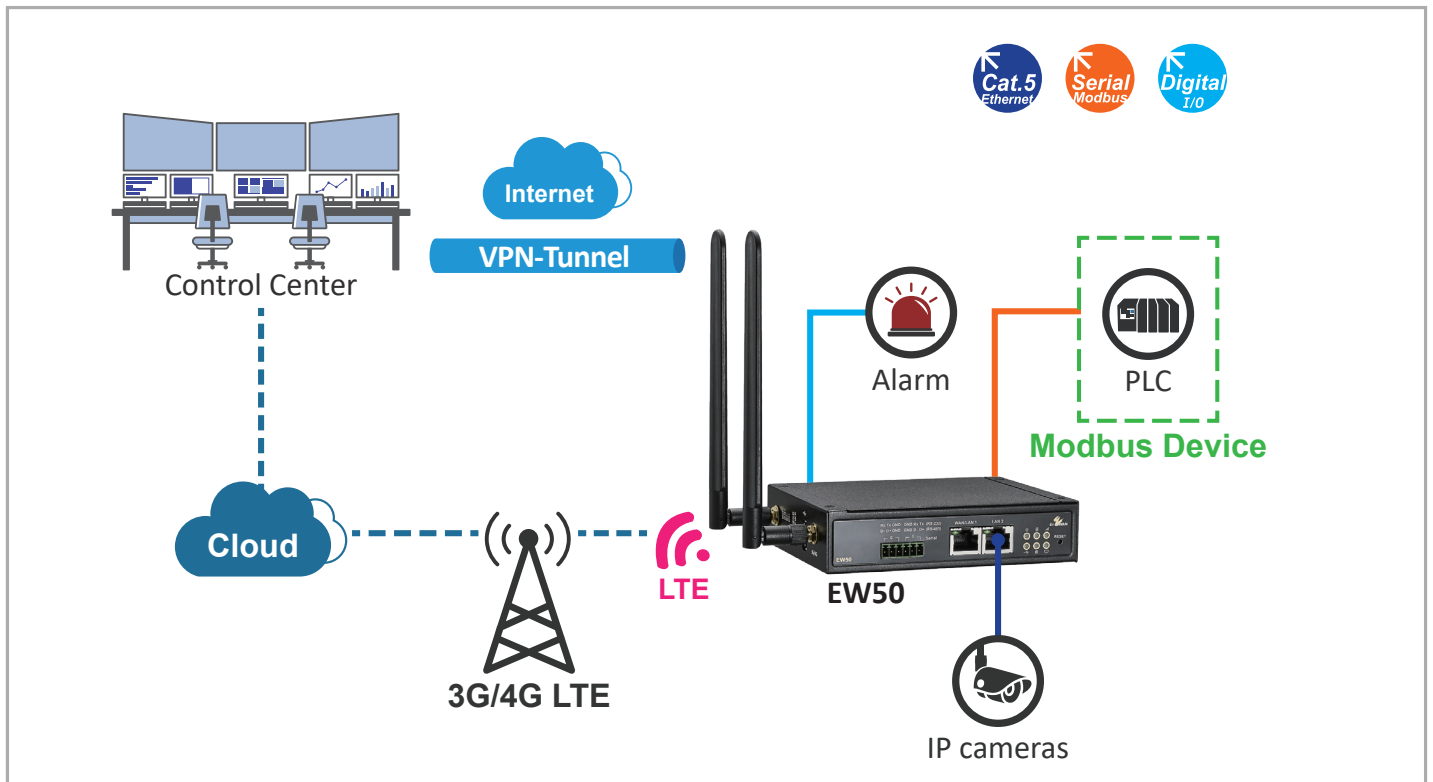KC*: EW50-EUS for south Korea only supports Roaming and MVNO SIM
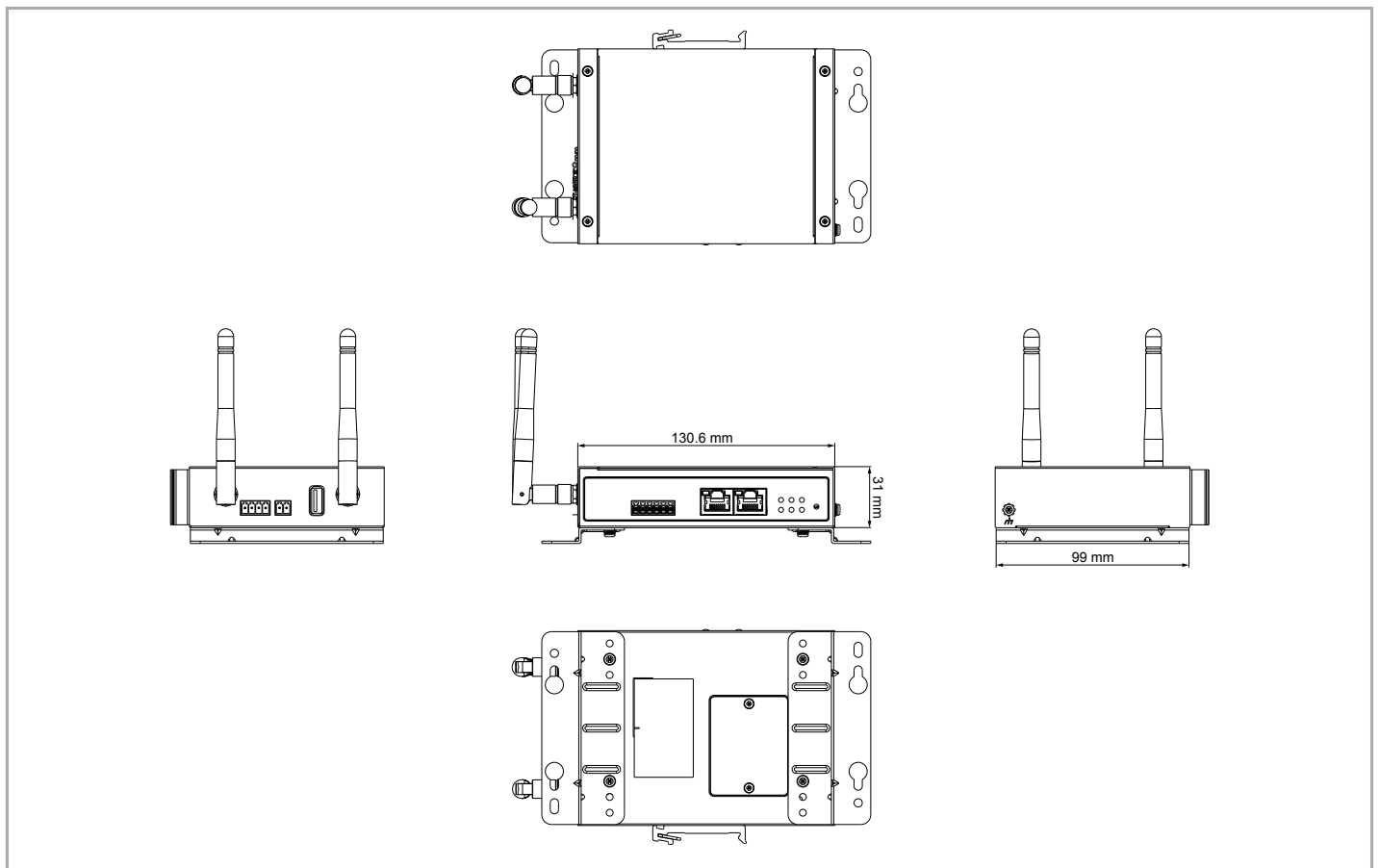
SDPPI**: Indonesia Radio Type Approval

78410/SDPPI/2021

13696

Application Diagram

Control Center

Internet

VPN-Tunnel

Cloud

3G/4G LTE

LTE

EW50

Alarm

PLC

Modbus Device

IP cameras

Cat.5 Ethernet

Serial Modbus

Digital I/O

Dimensions

130.6 mm

31 mm

99 mm

Ordering Information

Model

EW50-EUS	Industrial LTE Cellular Gateway-EUROPE & SOUTH ASIA
EW50-TA	Industrial LTE Cellular Gateway-TAIWAN & AUSTRALIA
EW50-JP	Industrial LTE Cellular Gateway-JAPAN

Optional Accessories

GWAP-1	Item	Amount	Frequency	Description	Note
	LTE	2	698-960/ 1710-2170/ 2300-2690MHz	Cellular Omni Antenna, N/female Jack Bulkhead	IP67
	Surge Protector	2	–	0-6GHz Surge Lightning Protector, N/female Jack Bulkhead To N/male Plug	IP67
	Bracket	2	–	–	–
	LTE Cable	2	–	SMA/male Plug To N/male Plug with NFC200 Cable	–

P/N.	Image	Item	Amount	Frequency	Description	Note
W96G-GY113HT46*		Cellular Antenna Base	1	–	This antenna base can be used on EW50 / EW200 / AiR PACE LTE antenna to extend 1.5M. Each model needs 2 antenna bases. This antenna base is not IP67.	–
W96G-11361Y50S		Wall Mount Kit	1 set	–	1 set package includes 2 wall mount (Right side & Left side) & 4 pcs screws	–

* Please be noted that these accessories are not for JP market.