EW50-V Series

Industrial LTE Cellular Gateway - Intelligent Assistant-Enabled by Docker



Overview

Your Secure and Reliable Next-Gen IIoT Cellular Gateway

The EW50-V is the latest addition to the popular EW50 series. It provides reliable and secure connectivity designed for harsh environments, giving operations and IT real-time awareness with remote monitoring. Moreover, The EW50-V is a versatile 4G LTE smart gateway with 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

Comprehensive Data Security

IPSec and OpenVPN support up to 10 concurrent tunnels

Remote Control

EtherWAN Remote Device Manager **"Pave2Edge"** for deployment and remote control

Reliable and Uninterrupted Connection

EtherWAN "**Garantie Link**" to keep network connection always on

Equipped with dual SIM cards for failover

Failover management for network reliability and uninterrupted uptime

On online 4G LTE internet connection

Rugged Industrial Design

Features metal housing with fan-less cooling, IP30

Supports -30 to 75°C (-22 to 167°F) operating temperature

'Docker' Containerization Supported

The most popular containerization platforms that allow you to develop, deploy, and run applications inside containers.

Secure Boot + TPM 2.0

Secure boot protects device against any attempt to use malware.

Trusted Platform Module (TPM) is to provide hardware-based, security-related functions that helps you with actions such as generating, storing, and limiting the use of cryptographic keys.

Specifications

Cellular Interface

Standards

Cellular Frequency Bands: (Please check Frequency Bands Region 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

Antenna connector

2 x SMA Female

SIM Slot

2 Nano SIM

Cloud Development Platform

Platform

Support Microsoft Azure / AWS

Field Communication

COM Port Transparent

TCP Client, TCP Server

Modbus

Gateway for Modbus TCP, Modbus RTU

Data Interchange

MQTT and Cloud

Data Logging

Monitoring Mode and Proxy mode

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-485

Power

Input

DC 12 - 24V

Power consumption

8.5W Max.

Mechanical

Casing

Metal

Dimension

130 x 40 x 106 mm (w/o mounting brackets)

Weight

0.9Kg (1.98lb)

Installation

DIN-Rail

I/O Connectors

Ports

1 x Digital In ("Logic 0": 0-2V, "Logic 1": 5-30V)

1 X Digital Out (None-Relay Output, 30V/1A, Sink Type , Normal Open)

SD Card

SD Card

Micro SD card x 1 (Up to 64GB)

Functions

Port Forwarding

Port Forwarding, DMZ

VPN

IPSec, OpenVPN

Event Engine/ Event Handling

Events: SMS, DI, Modbus, MQTT, PING, RSSI, System

Actions: SMS, email, DO, Modbus, MQTT, System, Reboot, LINE Message

RESTful API

Easy to remote configure settings

F/W Upgrade

By OTA (Over-the-Air)

Environment Limits

Operating Temperature

-30 to 75°C (-22 to 167°F)

Storage Temperature

-40 to 85°C (-40 to 185°F)

Ambient Relative Humidity

5% to 95%

Regulatory Approvals

Safety

IEC 62368-1: 2018

Emissions/Immunity

EW50-VEA CE/ TDRA / IMDA / NTBC / NTC

EW50-VT NCC BSMI

EW50-VUS

FCC

Cellular: PTCRB/AT&T/T-Mobile

EW50-VJP JATE

Standard Accessory

4G LTE antenna x 2

GPS antenna x 1 (US model only)

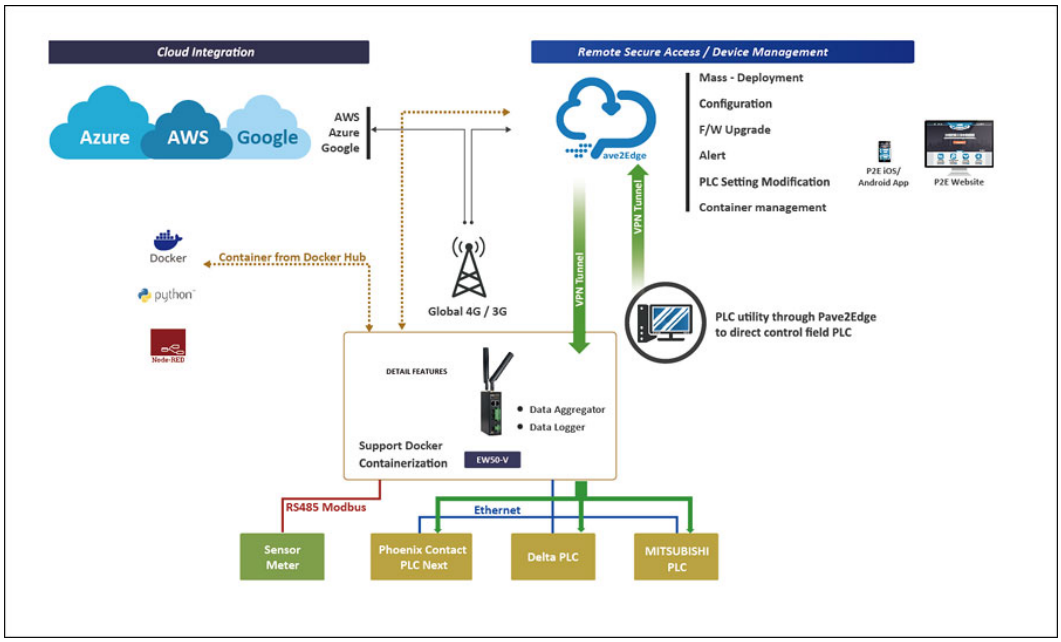
DIN Rail kit x 1 + 2 screws

6 PIN terminal block x 1

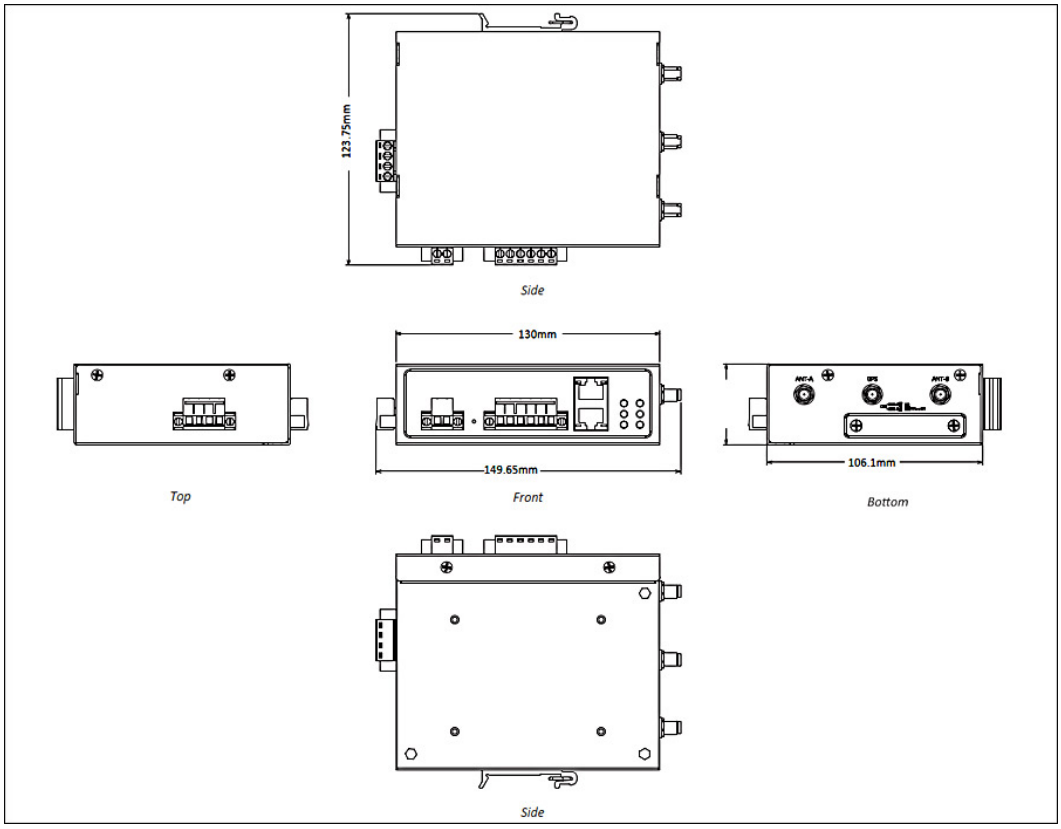
4 PIN terminal block x 1

2 PIN terminal block x 1

Application



Dimensions



Frequency Bands

	4G LTE		3G	Region
Sku Code	**FDD LTE**	**TDD LTE**	**WCDMA**	
EA	B1 (2100) / 3 (1800) / 5 (850) / 7 (2600) / 8 (900) / B20 (800)	B38 (2600) / B40 (2300) /B41(2500)	/B41(2500) B1(2100) / 5 (850) / 8 (900)	EU, APAC
US	B2 (1900) / B4 (2100) / B5 (850) / B13 (700) / B14 (700) / B66 (2100) / B71 (600)	B40(2300)	B2 (1900) / B4 (2100) / B5 (850)	USA
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
VT	B1(2100) / B2(1900) / B3 (1800) / B4(2100) / B5 (850) / B7 (2600) / B8 (900) / B12 (700) / B13 (700) / B18 (850) / B19 (850) / B20 (800) / B26 (850) / B28 (700) / B66 (2100)	B38 (2600) / B40 (2300) / B41 (2500)		Taiwan

Ordering Info

Model

EW50-VEA	Industrial LTE Cellular Gateway-EU & APAC
EW50-VUS	Industrial LTE Cellular Gateway-USA
EW50-VJP	Industrial LTE Cellular Gateway-Japan
EW50-VT	Industrial LTE Cellular Gateway-Taiwan

Optional Accessories

HDR-30-12	24W/ 2A DIN Rail 12VDC Industrial Power Supply
HDR-30-24	30W/1.5A DIN-Rail 24VDC Hardened Power Supply

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	-

Image	P/N.	Item	Amount	Frequency	Description	Note

	W96G-T00B-A1A3	Magnetic Cellular Antenna Base	1	-	This magnetic antenna base can be used on EW50 / EW50-V / EW200 series. Cable length is 2M.Each model needs 2 antenna bases.	Not IP67

Tune-up Power

Technologies	Frequency range (MHz)	Max. Transmit Power	Tune-Up Power Tolerance
WCDMA Band I	1920-1980 MHz	24dBm	+1/-3dB
WCDMA Band VIII	880-915 MHz	24dBm	+1/-3dB
LTE Band 1	1920-1980 MHz	23dBm	±2dB
LTE Band 7	2500-2570 MHz	23dBm	±2dB
LTE Band 8	880-915 MHz	23dBm	±2dB
LTE Band 20	832-862 MHz	23dBm	±2dB
LTE Band 38	2570-2620 MHz	23dBm	±2dB
LTE Band 40	2300-2400 MHz	23dBm	±2dB

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