# WISE-6610 V2

# **Industrial LoRaWAN Gateway**





#### **Features**

- Latest Semtech SX1302 gateway chipset solution, it doubles the packet processing speed
- Embedded LoRaWAN Network Server for both private and public system application
- Compatible with Multiple Network Servers like Actility, The Things Network, Chirpstack, AWS, etc
- Supports Modbus/TCP, MQTT, BACnet, OPCUA protocols
- Build-in Node-Red, LoRaWAN network server and Edgelink software (with -EL P/N) packages
- Global LoRaWAN Frequency Plans
- DIN rail and wall mounting design
- Backhaul 4G (by additional adapter)
- Embedded LoRaWAN Network Server supports max 500 nodes connections

## Introduction

The WISE-6610v2 is the next generation of Industrial LoRaWAN Gateway. It has high-performance that offers reliable connectivity for industrial environments. It supports the LoRaWAN protocol for building LoRaWAN private and public networks, as well as various industrial protocols including Modbus, OPCUA, BACnet/IP, MQTT, etc. The hardware and software flexibility of the WISE-6610 provides rich features for edge intelligence systems, and also supports VPN tunneling with various protocols ensures safe communications. The WISE-6610 also runs a embedded LoRaWAN network server (LNS) that can decode the LoRaWAN data directly in our device.

## **Specifications**

#### **System**

CPU ARM Cortex-A8, 1000 MHz
 RF Chip Semtech SX1302
 Memory 4GB DDR3
 Internal Storage 16GB EMMC

## **WSN Support**

Standard LoRaWAN

■ Transmit Power(dBm) 13.94(CE)/25.17(FCC)

• **Frequency** IN865/EU868/AU915/US915/KR920/AS923/CN470

• ANT Connector RP-SMA Male connector x 1

Antenna Gain (dBi)
 2.23 (EU868MHz)/0.67 (915MHz)/2.9 (928MHz)

#### **LAN Interface**

• Ethernet 10/100 Mbps, auto MDI/MDIX

• Connector 2 x RJ45

• **Protection** 1.5-kV built-in magnetic isolation protection

#### General

LED Indicators
 Reboot Trigger
 Reset button

## Software

• Network and Routing DHCP server, NAT/PAT, VRRP, dynamic DNS client,

DNS proxy, VLAN, QoS, DMVPN, NTP client/server, IGMP, BGP, OSPF, RIP, SMTP, SMTPS, SNMP v1/v2c/v3, backup routers, PPP, PPPoE, SSL, port forwarding, host port routing, Ethernet bridging, network server

• Configuration SSH, Web Browser

• Network Security HTTPS, SSH, VPN tunnels, SFTP, DMZ, firewall

(IP filtering, MAC address filtering, inbound/outbound

port filtering)

• **VPN tunnelling** Open VPN client and server and P2P, L2TP, PPTP, GRE,

EasyVPN, IPSec with IKEv1 and IKEv2

Software package Node-Red, LoRaWAN Network Server, Edgelink

(only in -EL P/N)

#### **Mechanics**

Dimensions (W x H x D) 150 x 37.5 x 83 mm (5.9" x 1.48" x 3.27")

Mounting DIN rail, wall Weight 500g
Enclosure Rating IP30

SD CardSIM Card1 x Micro SD Card Slot2 x Nano SIM Card Slot

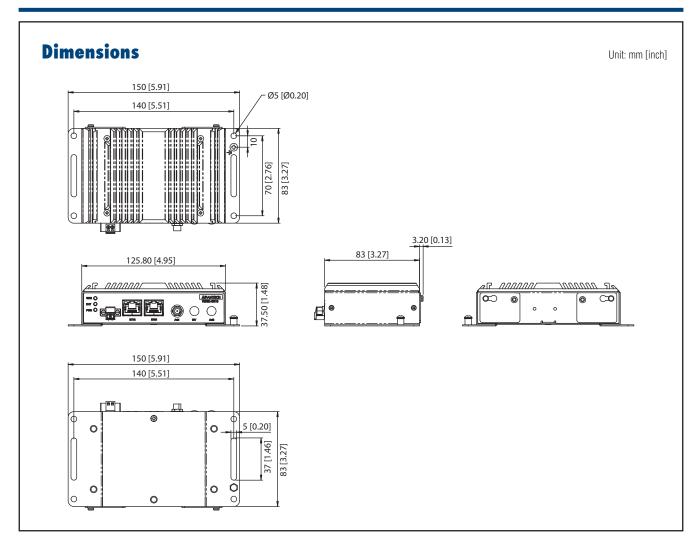
#### **Power Requirements**

• Power Input  $9 \sim 36 \text{ V}_{DC}$ 

Power Consumption
 Typ. 3W@24V (Max.3.2W)
 Typ. 3W@12V (Max.4W)

#### **Environment**

Operating Temperature -40 ~ 75°C
 Storage Temperature -40 ~ 85°C
 Operating Humidity 10 ~ 95% RH



# **Ordering Information**

<ul><li>WISE-6610-NB</li></ul>	LoRaWAN gateway with NA915 MHz
<ul><li>WISE-6610-EB</li></ul>	LoRaWAN gateway with EU868 MHz
<ul><li>WISE-6610-TB</li></ul>	LoRaWAN gateway with AS923 MHz
<ul><li>WISE-6610-JB</li></ul>	LoRaWAN gateway with JP923 MHz
<ul><li>WISE-6610-CB</li></ul>	LoRaWAN gateway with CN470 MHz
<ul><li>WISE-6610-EL-NB</li></ul>	LoRaWAN gateway with NA915 MHz and Edgelink
<ul><li>WISE-6610-EL-EB</li></ul>	LoRaWAN gateway with EU868 MHz and Edgelink
<ul><li>WISE-6610-EL-TB</li></ul>	LoRaWAN gateway with AS923 MHz and Edgelink
<ul><li>WISE-6610-EL-JB</li></ul>	LoRaWAN gateway with JP923 MHz and Edgelink
<ul><li>WISE-6610-EL-CB</li></ul>	LoRaWAN gateway with CN470 MHz and Edgelink
<ul><li>WISE-6610-BT0</li></ul>	WISE-6610 Standard P/N with accessories

 $<sup>^{\</sup>star}$  The package includes a LoRa antenna and a DIN rail mounting bracket, except for the WISE-6610-C CN470 version.

## **Accessories**

# Cellular Solution (SIM card is not includes, cable and antenna will need 2pcs as a set)

96PD-EG25GGB LTE Cat 4 Module with GNSS, Global version
 1750006264 SMA(F) Cable, 15 cm
 1750009236-01 LTE Antenna for 698~2690MHz
 XAJP-IAN067 LTE Antenna for TELEC, Japan only

#### Power Supply for WISE-6610 V2

BB-RPS-V2-WR2-US
 BB-RPS-V2-WR2-UK
 BB-RPS-V2-WR2-EU
 BB-RPS-V2-WR2-AUS
 Power Supply, v2, 12V/1A, UK plug
 Power Supply, v2, 12V/1A, EU plug
 Power Supply, v2, 12V/1A, AUS plug

#### WISE-6610 CN470 Antenna

**1751000787-01** LoRa Antenna for 470~520MHz