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(with -EL P/N) and OPCUA (with -EL P/N) 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** PWR, DAT, WAN, ETH
- **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 Card** 1 x Micro SD Card Slot
- **SIM Card** 2 x Nano SIM Card Slot

Power Requirements

- **Power Input** 9 ~ 36 V_{DC}
- **Power Consumption** Typ. 3W@24V (Max.3.2W)
Typ. 3W@12V (Max.4W)

Environment

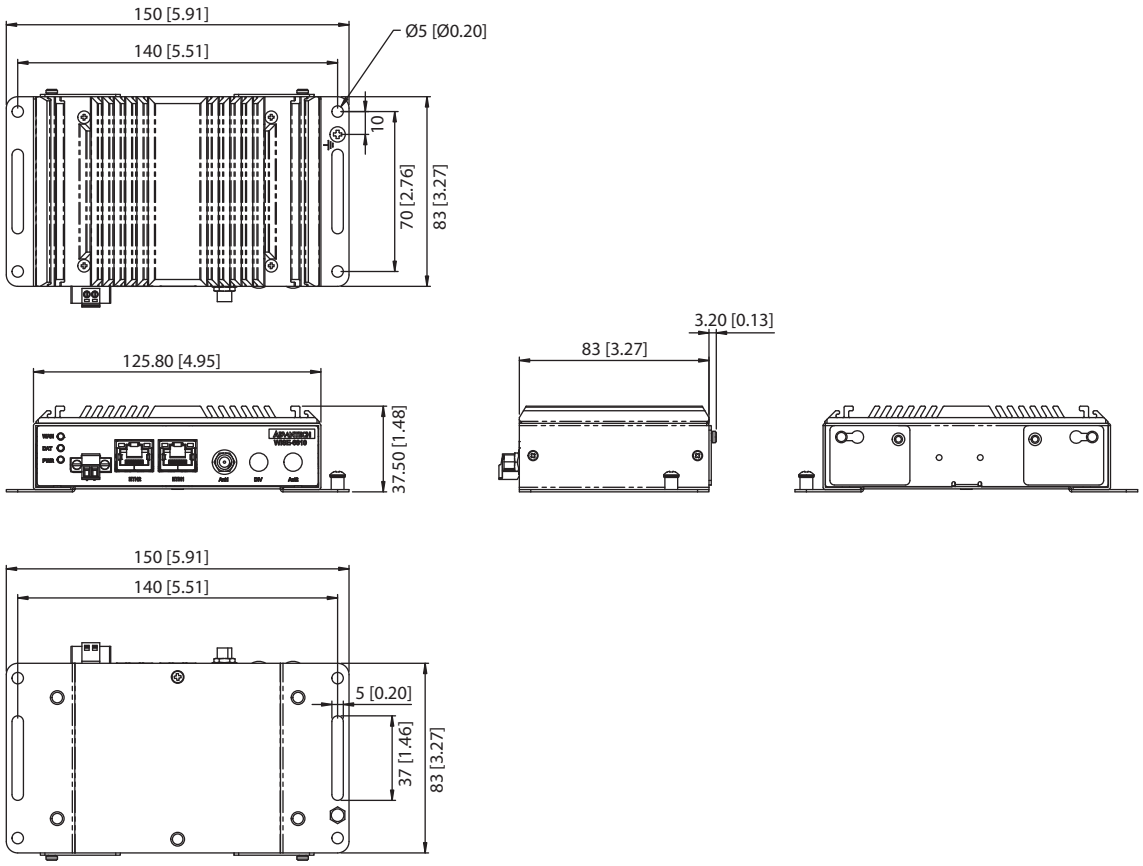
- **Operating Temperature** -40 ~ 75°C
- **Storage Temperature** -40 ~ 85°C
- **Operating Humidity** 10 ~ 95% RH

All product specifications are subject to change without notice.

Last updated: 20-May-2025

Dimensions

Unit: mm [inch]



Ordering Information

- **WISE-6610-NB** LoRaWAN gateway with NA915 MHz
- **WISE-6610-EB** LoRaWAN gateway with EU868 MHz
- **WISE-6610-TB** LoRaWAN gateway with AS923 MHz
- **WISE-6610-JB** LoRaWAN gateway with JP923 MHz
- **WISE-6610-CB** LoRaWAN gateway with CN470 MHz
- **WISE-6610-EL-NB** LoRaWAN gateway with NA915 MHz and Edgelink
- **WISE-6610-EL-EB** LoRaWAN gateway with EU868 MHz and Edgelink
- **WISE-6610-EL-TB** LoRaWAN gateway with AS923 MHz and Edgelink
- **WISE-6610-EL-JB** LoRaWAN gateway with JP923 MHz and Edgelink
- **WISE-6610-EL-CB** LoRaWAN gateway with CN470 MHz and Edgelink
- **WISE-6610-BTO** WISE-6610 Standard P/N with accesoories

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

WISE-6610 CN470 Antenna

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