WISE-6610

Industrial LoRaWAN Gateway



Features

- Long-range wide area IoT gateway
- LoRaWAN protocol for closed and public system application
- Ethernet and I/O for connecting a wide array of field assets
- DIN rail and wall mounting design
- Low power consumption for solar and battery power applications
- Enhanced memory for hosting customer software applications
- Redundancy-enhanced functions for continuous data transmission





Introduction

The WISE-6610 is a high-performance LoRaWAN gateway that offers reliable connectivity for industrial environments. It supports the LoRaWAN protocol for building LoRaWAN private and public networks, as well as various protocols including MQTT. The hardware and software flexibility of the WISE-6610 provides rich features for edge intelligence systems, and its support for VPN tunneling with various protocols ensures safe communications. The WISE-6610 also provides a network server that can phase the LoRaWAN data in our device. The WISE-6610 provides the redundancy-enhanced functions to prevent connection loss.

Specifications

WSN Support

Standard LoRaWAN 868/915/923MHz Frequency **ANT Connector** RP-SMA Male connector x 1

LAN Interface

10/100 Mbps, auto MDI/MDIX Ethernet

Connector

Protection 1.5-kV built-in magnetic isolation protection

Digital I/O

Port Type 1x Digital Input On Voltage: 2.7V to 36VDC

 Port Connector 4-way Molex mini-fit connector

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

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

EasyVPN, IPSec with IKEv1 and IKEv2

Cellular Interface (WISE-6610-EXXXC/WISE-6610-AXXXC Only)

 LTE Bit rate 150 Mbps (DL), 50 Mbps (UL)

LTE Bands B20 (800 MHz), B8 (900 MHz), B3 (1800 MHz), B1 (2100

MHz), B7 (2600 MHz)

- 3G Bit rate 42.0 Mbps (DL), 5.76 Mbps (UL) 900 2100 MHz

3G Rands No. of SIM Slots 2 x Mini SIMs (2FF)

2 x RP-SMA female connectors **ANT Connector**

Cellular Interface (WISE-6610-N100C-A/N500C-A Only)

LTE Cat M1

LTE Bit rate

375 Kbps (DL), 375 Kbps (UL) B12, B13, B28 (700 MHz), B20 (800 MHz), B5, B18, B19, B26 (850 MHz), B8 (900 MHz), B4 (1700 MHz), B3 (1800 LTE FDD

MHz), B2 (1900 MHz), B1 (2100MHz)

 LTE TDD B39 (1900 MHz)

Mechanics

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

DIN rail, wall Mounting Weight 500g **Enclosure Rating**

SD Card 1 x Micro SD Card Slot (WISE-6610-XXXXC Only)

Power Requirements

Power Input

9 ~ 36 V_{DC} 4-way Molex mini-fit connector Power Connector 8.2W-9W (9-36V_{DC}/1A) **Power Consumption**

Environment

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

Regulatory Approvals

EMC

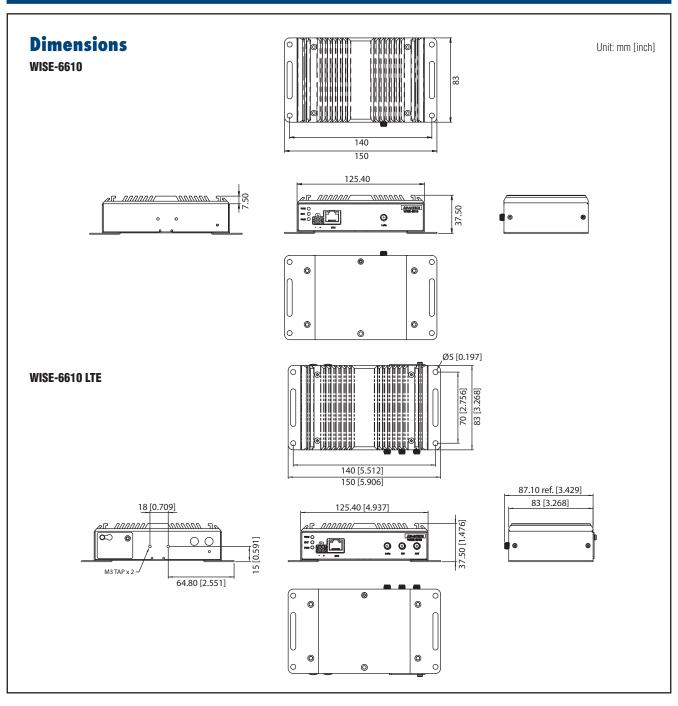
EN61000-4-2, Level 3 EN61000-4-3, Level 3 EN61000-4-4, Level 3 EN61000-4-5, Level 3 EN61000-4-6, Level 3 EN61000-4-12, Level 3 EN61000-4-11, voltage dip: 70%

IEC 60068-2-27 Shock Free Fall IFC 60068-2-32 IEC 60068-2-6 Vibration RF FCC/RED/NCC

Accessories

Power Supply BB-RPS-M04-M (not included) LoRaWAN Antenna 1750008946-01(included)

LTE Antenna 1750009236-01 (cellular version included)



Ordering Information

- WISE-6610-N100-A
- WISE-6610-E100-A
- WISE-6610-A100-A
- WISE-6610-N500-A
- WISE-6610-E500-A
- WISE-6610-A100C-A
- LoRaWAN gateway supports up to 100 nodes with 915 MHz
- LoRaWAN gateway supports up to 100 nodes with 868 MHz
- LORAWAN gateway supports up to 100 nodes with 923 MHz LoRAWAN gateway supports up to 500 nodes with
- 915 MHz LoRaWAN gateway supports up to 500 nodes with 868 MHz
- LoRaWAN Cellular Gateway support up to 100 nodes with 923 MHz
- WISE-6610-A500C-A
- WISE-6610-A500-A
- WISE-6610-N100C-A
- WISE-6610-N500C-A
- WISE-6610-E100C-A
- WISE-6610-E500C-A
- LoRaWAN Cellular Gateway support up to 500 nodes with 923 MHz
- LoRaWAN gateway supports up to 500 nodes with
- LoRaWAN Cellular Gateway support up to 100 nodes with 915 MHz
- LoRaWAN Cellular Gateway support up to 500 nodes with 915 MHz
- LoRaWAN Cellular Gateway support up to 100 nodes with 868 MHz
- LoRaWAN Cellular Gateway support up to 500 nodes with 868 MHz