WISE-6610

Indsutrial LoRaWAN Gateway

Features

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

Introduction

The WISE-6610 is a high-performance LoRaWAN gateway with reliable connectivity options for industrial environments and LoRaWAN protocol support for building LoRaWAN private and public networks. It also supports other protocols, including MQTT, and its hardware and software flexibility provides rich features to edge intelligence systems. The WISE-6610 allows for VPN tunnel creation with various protocols that ensure safe communication. It also provides a network server that can encrypt and convert LoRaWAN data in the device, and its redundancy-enhanced functions are specifically designed to prevent connection loss.

Specifications

WSN Support

- **Standard**   LoRaWAN
- **Frequency**   868/915 MHz
- **ANT Connector**   1 x SMA female connector

LAN Interface

- **Ethernet**   10/100 Mbps, auto MDI/MDIX
- **Connector**   1 x RJ45
- **Protection**   1.5-kV built-in magnetic isolation protection

Digital I/O

- **Port Type**   1x Digital Input On Voltage: 2.7V to 36V$_{DC}$
- **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 port filtering)
- **VPN tunnelling**   Open VPN client and server and P2P, L2TP, PPTP, GRE, EasyVPN, IPSec with IKEv1 and IKEv2

Mechanics

- **Dimensions (W x H x D)** 150 x 30 x 83 mm (5.9" x 1.18" x 3.27")
- **Mounting**   DIN rail, wall
- **Weight**   500g
- **Enclosure Rating** IP30

Power Requirements

- **Power Input**   9 ~ 36 V$_{DC}$
- **Power Connector**   4-way Molex mini-fit connector
- **Power Consumption** 3.1/6.6/40 mW (average/peak/sleep mode)
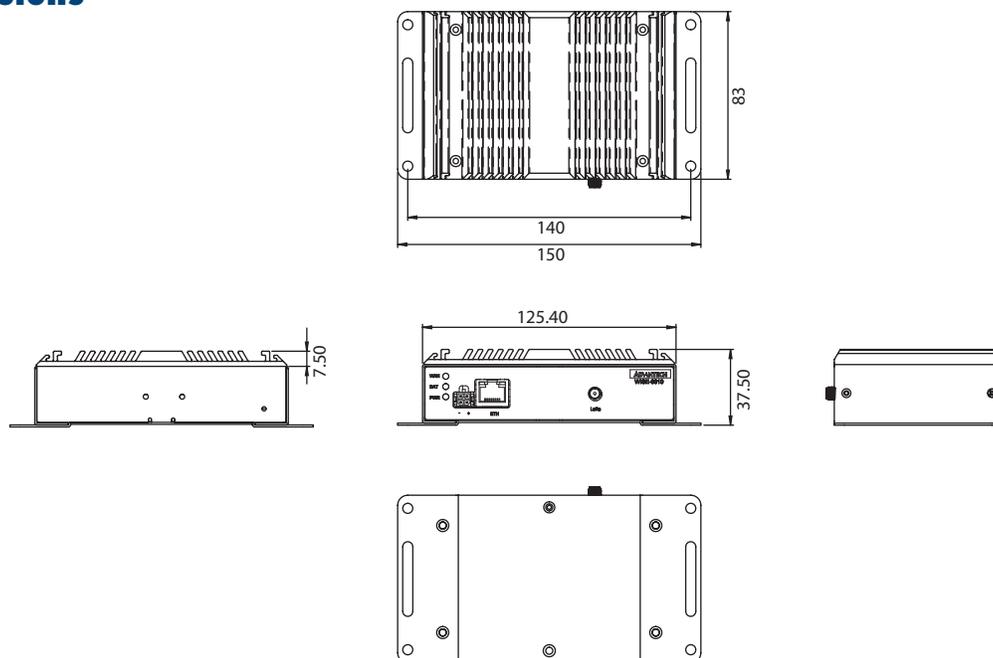
Environment

- **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%
- **Shock**   IEC 60068-2-27
- **Free Fall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6

ADVANTECH   **Industrial Wireless and Protocol Gateway Solutions**

All product specifications are subject to change without notice.   Last updated: 4-Jun-2018

Dimensions

Unit: mm

Ordering Information

- **WISE-6610-N100-A**   LoRaWAN gateway supports up to 100 nodes with 915 MHz
- **WISE-6610-E100-A**   LoRaWAN gateway supports up to 100 nodes with 868 MHz
- **WISE-6610-N500-A**   LoRaWAN gateway supports up to 500 nodes with 915 MHz
- **WISE-6610-E500-A**   LoRaWAN gateway supports up to 500 nodes with 868 MHz