

WISE-R311

LoRaWAN gateway module

Preliminary



CE FCC IC RoHS

Features

- Latest Semtech SX1302 gateway chipset solution
- Long-range wide area IoT gateway
- Support embedded LNS software(docker image) for linux-based OS
- LoRaWAN protocol for both private and public system application
- Standard mini-pcie form factor
- Global LoRaWAN Frequency Plans

Introduction

WISE-R311 is the next generation of industrial LoRa gateway module. It has standard mini-pcie form factor can easily connect to most of platform in the world. It has high-performance that offers reliable connectivity for industrial environments.

Advantech WISE-R311 is using Semtech SX1302 chipset solution, It is a new generation of baseband LoRa chip for gateways. It excels in reducing current consumption, simplifies the thermal design of gateways, and reduces the bill Of materials costs, yet it is capable of handling a higher amount of traffic than preceding devices.

Besides the hardware itself, Advantech also provides an embedded LoRaWAN network server (LNS) for linux-based OS platform. Users can easily manage all the end-devices and gateways with few simple clicks on the web.

Specifications

WSN Support

- **Standard** LoRa
- **Frequency** EU868/AU915/US915/AS923

General

- **Interface** Mini-pcie

Power Requirements

- **Power Input** $+3.3 \pm 5\% V_{DC}$
- **Power Consumption** TBD

Environment

- **Operating Temperature** $-40 \sim 75^{\circ}\text{C}$
- **Storage Temperature** $-40 \sim 85^{\circ}\text{C}$
- **Operating Humidity** $10 \sim 95\% \text{ RH}$

Ordering Information

- **WISE-R311-NA** 8-ch LoRaWAN Gateway module, 902~928MHz version
- **WISE-R311-EA** 8-ch LoRaWAN Gateway module, 862~870MHz version

Accessories

- **1750008945-01** SMA(M) cable, 10 cm
- **1750008946-01** Dipole Ant. 863~928MHz SMA 90/180 170mm

Block Diagram

