WISE-2211

Proprietary LPWAN (Sub-G) Wireless power over Analog Input Module

NEW

Features

- Proprietary LPWAN (Sub-G) wireless technology with Less interference with high penetration rate capability
- Power over AI channel design, no extra power wired installation needed.
- High efficiency power charger design via DC input from sensors (DC, 4~20mA)
- Compact design, suitable for plug and play applications

VCI / 🜲 / (((/ CE / FCC / RoHS COMPLIANT 2002/95/EC

Introduction

Power over analog input channel design with LPWAN technology are ideal for sustainable factory, building applications. Powered by maximum 3 DC output sensors, no cables or batteries are required for switching or for collecting sensor information such as temperature and pressure. The private LPWAN network saves resources by using fewer cables and eliminating the need for batteries.

Less interference with high penetration rate

LPWAN, created for machine-to-machine (M2M) and Internet of things (IoT) networks, is not a single technology, but a variety of low-power, wide area network technologies. Compare with traditional mobile network, LPWAN is known as lower cost with higher power efficiency. WISE-2211 is the proprietary LPWAN which provides better connection compare with traditional wireless technology.

Fast build-in your IoT applications

With power over AI channel design, no wire power installation is needed. WISE-2211 is designing for fast build-in your IoT applications. WISE-2211 can fast connect your sensors, which has DC output, without installation another power source.

High efficiency power charger design

With Advantech's strong hardware and software design capacity, WISE-2211 allows to transmit the power current measurement data in seconds.

Common Specification

Wireless Communication

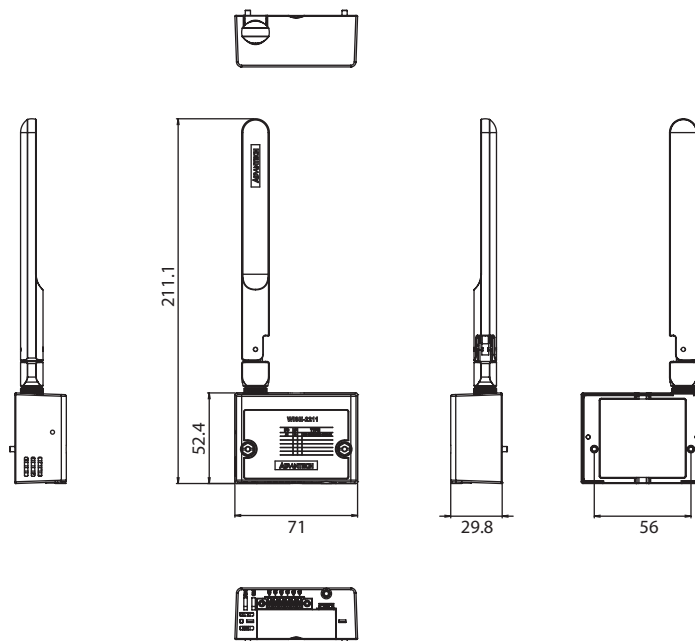|	
Frequency Band	NA: 923MHz (920.80~924.40) EU: 868MHz (865.20~868.80) JA: 923MHz (920.80~923.20)
Transmit Power	Up to +12dBm
Data Rate	625bps / 2.5k bps / 5K bps / 50K bps
Topology	Star

General

Channel	3 (for sensor, 4-20mA, DC)
Input Range	4~20mA, Direct current
Resolution	11 bits
Accuracy	± 0.2 % of FSR
Drift	40ppm
Power Input	Power source is from AI Channel
Configuration Interface	Micro-B USB
Mounting	DIN 35 rail, wall, pole
Dimension (W x H x D)	71 x 52 x 30 mm (without Antenna)
Certification	CE (RED), FCC, TELEC, NCC

Environment

Operating Temperature	-25~70 °C
Operating Humidity	5~95% RH
Storage Temperature	-40~85 °C
Storage Humidity	0~95% RH

Dimensions

Unit: mm

211.1

52.4

71

29.8

56

WISE-4210-AP

Wireless Communication

- **Frequency Band**   NA: 923MHz (920.80~924.40)
  EU: 868MHz (865.20~868.80)
  JA: 923MHz (920.80~923.20)
- **Transmit Power**   Up to +14dBm
- **Receiver Sensitivity**   -115dBm using Long-Range Mode
  -100dBm at 50kbps
- **Data Rate**   625bps / 2.5k bps / 5K bps / 50K bps
- **Topology**   Star
- **Network Capacity**   64 clients

General

- **Ethernet**   RJ-45 (for configuration and data query)
- **RS-485**   Data+, Data- (for query node data)
- **Messaging Protocol**   Modbus/TCP, Modbus/RTU, REST, MQTT
- **Application Protocol**   HTTP, HTTPS, SNTP, DHCP
- **Transport Protocol**   TCP, UDP
- **Supports RESTful Web API in JSON format**
- **Supports Web Server in HTML5**

Ordering Information

Wireless power over AI module

- **WISE-2211-NA**   LPWAN Wireless power over Analog Input Module - EU/NA

Wireless Access Point

- **WISE-4210-APNA**   LPWAN Wireless to Ethernet AP – EU/NA

Accessories

- **1750008837-01**   902-928MHz Dipole Antenna for WISE-4210/WISE-2210/WISE-2211
- **1750008836-01**   863-870MHz Dipole Antenna for WISE-4210/WISE-2210/WISE-2211