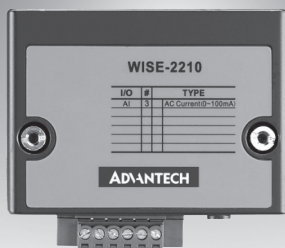


WISE-2210

LPWAN Wireless Self-powered CT Node

NEW



Features

- Self-powered Wireless technology
- High efficiency power charger design via CT (Current transformer, AC 0-100mA)
- Power measured in seconds
- Less interference with high penetration rate
- Max. 3 AI channels for CT and sensors
- Plug and play

Introduction

Self-powered with LPWAN technology are ideal for sustainable factory, building applications. Powered by maximum 3 CT (Current Transformer), no cables or batteries are required for switching or for collecting power current information such as pumps, servers, machine tools or presence detection. Self-powered LPWAN networks save 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-2210 is the proprietary LPWAN which provides better connection compare with traditional wireless technology.

Fast build-in your IoT applications

With Self-powered design, no wire power installation is needed. WISE-2210 is designing for fast build-in your IoT applications. As for the current transformer, we support power current range from 3-60A to 15-300A for different current measurement applications.

High efficiency power charger design

With Advantech's strong design capacity, WISE-2210 allows to transmit the power current measurement data in seconds.

Common Specification

Wireless Communication

- **Frequency Band** NA923: 923MHz (920.80-924.40), BW: 400kHz
EU868: 868MHz (865.20-868.80), BW: 400kHz
- **Transmit Power** Up to +12dBm
- **Data Rate** 625bps / 2.5k bps / 5K bps / 50K bps
- **Topology** Star

General

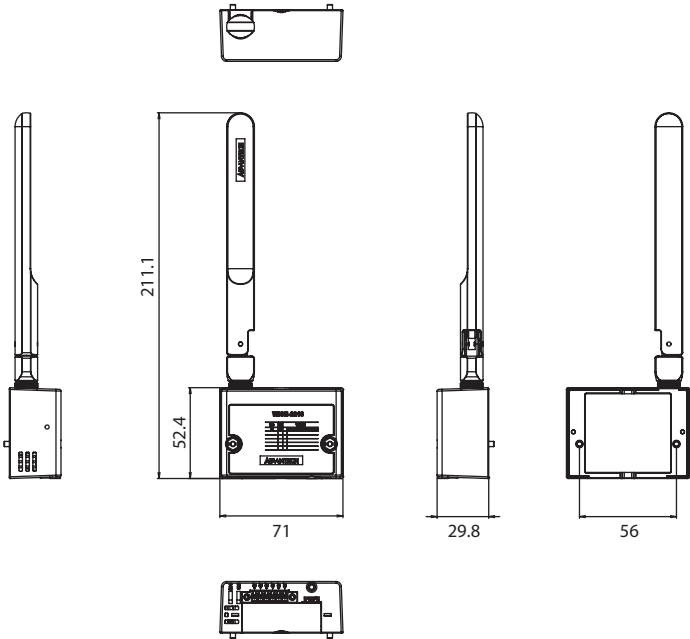
- **Channel** 3 (for CT, 0-100mA, AC)
- **Input Range** 0-100mA, Alternating current
- **Resolution** 11 bits
- **Accuracy** ± 0.2 % of FSR
- **Drift** 40ppm
- **Power Input** Power source is from AI Channel
- **Configuration Interface** Micro-B USB
- **Mounting** DIN 35 rail, wall, pole
- **Dimension (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



WISE-4210-AP

Wireless Communication

- **Frequency Band** NA923: 923MHz (920.80-924.40), BW: 400kHz
EU868: 868MHz (865.20-868.80), BW: 400kHz
- **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, SNMP, DHCP
- **Transport Protocol** TCP, UDP
- **Supports RESTful Web API in JSON format**
- **Supports Web Server in HTML5**

Ordering Information

Wireless Self-powered Sensor

- **WISE-2210-NA** LPWAN Wireless Self-powered CT Node - EU868/NA923

Wireless Access Point

- **WISE-4210-APNA*** LPWAN Wireless to Ethernet AP – EU868/ NA923

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

Current Transformer(CT)

P/N	Power Current Range (Primary)	Hole sizing (Primary)	Accuracy	Operating Temperature
96PD-CT241-60A	3-60A	10.0+/-0.2mm	Class 0.5	-20-65°C
96PD-CT248-100A	5-100A	15.7+/-0.3mm	Class 0.5	-40-65°C
96PD-CT24F-200A	10-200A	20.5+/-0.3mm	Class 0.5	-40-85°C
96PD-CT24C-300A	15-300A	35.7+/-0.3mm	Class 0.5	-40-85°C