

# WISE-2200-M

## LoRaWAN Single RS-485 I/O Module

NEW



NBTC ANATEL CE FCC RoHS

### Features

- LoRaWAN wireless technology with Less interference with high penetration rate capability
- Support Modbus/RTU communication protocol
- Support max. 128 address and 30 rule settings
- 5-50V<sub>DC</sub> wide input power design
- Compact design, suitable for plug and play applications
- Industrial design concept for different kinds of environment

### Introduction

WISE-2200-M is a LoRaWAN Modbus read/write communication device powered by Advantech. WISE-2200-M supports maximum 128 address and 30 rule setting can easily connect to modbus sensors and meters for different kinds of applications.

#### Less interference with high penetration rate

LoRaWAN, 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, LoRaWAN is known as lower cost with higher power efficiency. WISE-2200-M is the LoRaWAN which provides better connection compare with traditional wireless technology.

### Common Specification

#### Wireless Communication

- **Frequency Band** EU 863-870 (MHz) / RU 864-870 (MHz)  
US 902-928 (MHz) / AU 915-928 (MHz)  
AS 919-924 (MHz) / TH 920-925 (MHz)  
JP 920-928 (MHz)
- **Spreading Factor** 7~12
- **Transmit Power** Up to 20dBm
- **Topology** Star (LoRa/LoRaWAN)
- **Sensitivity** -148dB
- **Data Rate** 50 kbps at FSK mode EU  
21.9 kbps at SF7 mode US/TW  
5.47 kbps at SF7 mode for JP

#### General

- **Channel** 1 (for RS-485 Modbus connection)
- **LED Indicator** 2
- **Power Input** 5-50V<sub>DC</sub> from Terminal Block
- **Power Consumption** 1.5W
- **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** NCC, FCC, CE, ANATEL, NBTC, RCM

#### Environment

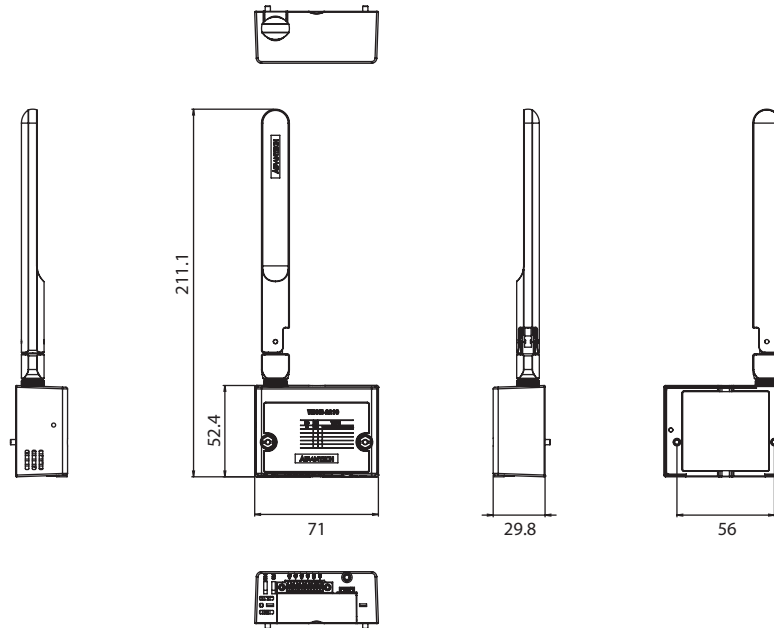
- **Operating Temperature** -25~70 °C
- **Operating Humidity** 5~95% RH
- **Storage Temperature** -40~85 °C
- **Storage Humidity** 0~95% RH

#### General

- **RS-485** Data+, Data- (for query node data)
- **Messaging Protocol** Modbus/RTU

## Dimensions

Unit: mm



## Ordering Information

### LoRaWAN Modbus Read/Write Communication Device

- **WISE-2200-MNA** LoRaWAN Modbus R/W Communication Device (NA915)

Firmware Image (Optional)	
96632200K00	WISE-2200-MKA Patch
96632200Z00	WISE-2200-MZA AU915 Patch

- **WISE-2200-MEA** LoRaWAN Modbus R/W Communication Device (EU868)
- **WISE-2200-MTA** LoRaWAN Modbus R/W Communication Device (AS923)

### LoRaWAN Gateway

- **WISE-6610-NB** LoRaWAN gateway with NA915 MHz
- **WISE-6610-EB** LoRaWAN gateway with EU868 MHz
- **WISE-6610-TB** LoRaWAN gateway with AS923 MHz
- **WISE-6610-JB** LoRaWAN gateway with JP923 MHz
- **WISE-6610-EL-NB** LoRaWAN gateway with NA915 MHz and Edgelink
- **WISE-6610-EL-EB** LoRaWAN gateway with EU868 MHz and Edgelink
- **WISE-6610-EL-TB** LoRaWAN gateway with AS923 MHz and Edgelink
- **WISE-6610-EL-JB** LoRaWAN gateway with JP923 MHz and Edgelink

### Accessories

- **1750008837-01\*** 902-928MHz Dipole Antenna for WISE-2200-MNA

\* needs to order antenna separately for WISE-2200-MNA part number