

# 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

### Ordering Information

#### LoRaWAN Modbus Read/Write Communication Device

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

Firmware Image (Optional)	
96632200J00	WISE-2200-MJA Patch
96632200K00	WISE-2200-MKA Patch
96632200Z00	WISE-2200-MZA AU915 Patch
96632200T00	WISE-2200-MTA AS923 Patch

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

#### LoRaWAN Gateway

- WISE-6610-N100-A** LoRaWAN Gateway NA915 Version
- WISE-6610-E100-A** LoRaWAN Gateway EU868 Version
- WISE-6610-A100-A** LoRaWAN Gateway AS923 Version

#### Accessories

- 1750008837-01\*** 902-928MHz Dipole Antenna for WISE-2200-MNA
- \* needs to order antenna separately for WISE-2200-MNA version

## Dimensions

Unit: mm

