

WISE-2200-M

LoRaWAN Single RS-485 I/O Module

NEW



NBTC ANATEL CE FCC RoHS COMPLIANT 2002/95/EC

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_{DC} 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_{DC} 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

