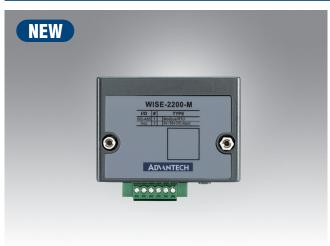
# **WISE-2200-M**

## LoRaWAN Single RS-485 I/O Module



#### **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
- 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
Transmit Power
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

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

**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)		tional)
	96632200J00	WISE-2200-MJA Patch
	96632200K00	WISE-2200-MKA Patch
	96632200Z00	WISE-2200-MZA AU915 Patch
	96632200E00	WISE-2200-MEA EU868 Patch
	96632200T00	WISE-2200-MTA AS923 Patch

#### **LoRaWAN Gateway**

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

#### Accessories

1750008836-01\*
1750008837-01\*
863-870MHz Dipole Antenna for WISE-2200-M
902-928MHz Dipole Antenna for WISE-2200-M

\* needs to order antenna separately

