

WISE-2200-M

LoRaWAN Single RS-485 I/O Module

NEW



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** 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
- **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)	
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

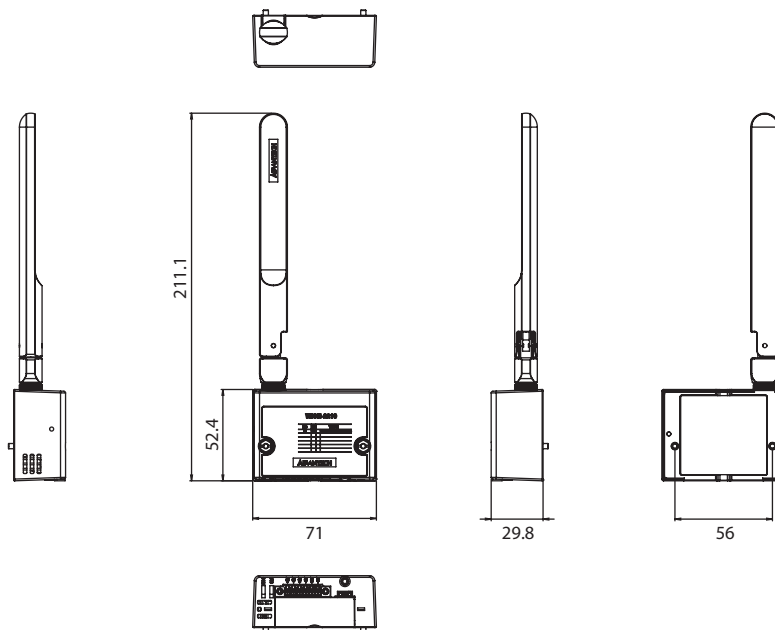
- **WISE-6610-N100-A** LoRaWAN Gateway NA915 Version
- **WISE-6610-E100-A** LoRaWAN Gateway EU868 Version
- **WISE-6610-A100-A** LoRaWAN Gateway AS923 Version

Accessories

- **1750008836-01*** 863-870MHz Dipole Antenna for WISE-2200-M
 - **1750008837-01*** 902-928MHz Dipole Antenna for WISE-2200-M
- * needs to order antenna separately

Dimensions

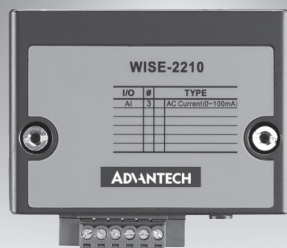
Unit: mm



WISE-2210

Proprietary LPWAN (Sub-G) power over CT Wireless Module

NEW



Features

- Proprietary LPWAN (Sub-G) wireless technology with Less interference with high penetration rate capability
- Power over AI channel design, no extra power wired installation needed.
- High efficiency power charger design via CT (Current transformer, AC 0~100mA)
- Max. 3 AI channels for CT node
- Compact design, suitable for plug and play applications

Introduction

Power over CT with LPWAN technology are ideal for sustainable factory, building applications. Powered by maximum 3 CT (Current Transformer), no extra line cables or batteries are required for switching or for collecting power current information such as pumps, servers, machine tools or presence detection. The private LPWAN network saves 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 Power over AI channel 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 hardware and software design capacity, WISE-2210 allows to transmit the power current measurement data in seconds.

Common Specification

Wireless Communication

- **Frequency Band** NA: 923MHz (920.80~924.40)
EU: 868MHz (865.20~868.80)
JA: 923MHz (920.80~923.20)
- **Transmit Power** Up to +12dBm
- **Data Rate** 625bps / 2.5k bps / 5K bps / 50K bps
- **Topology** Star

General

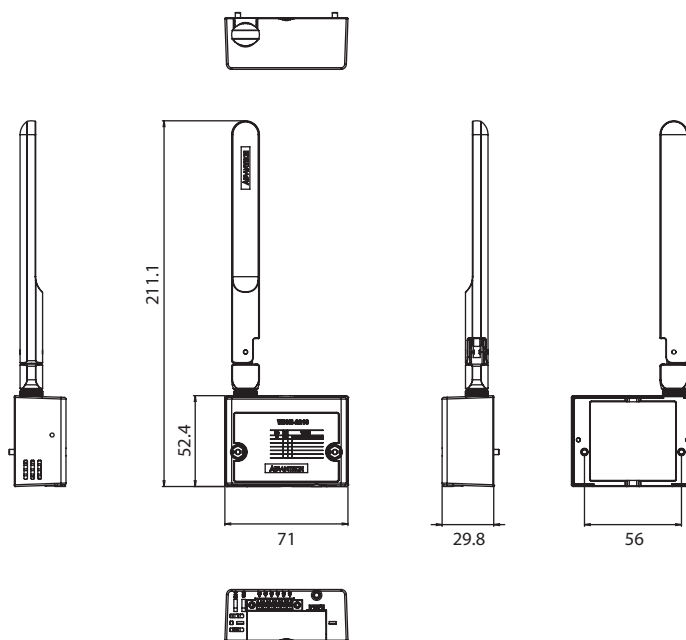
- **Channel** 3 (for CT, 0-100mA, AC)
- **Input Range** 0-100mA, Alternating current
- **Resolution** 11 bits
- **Accuracy** $\pm 0.2\%$ of FSR
- **Drift** 40ppm
- **Power Input** Power source is from AI Channel
- **Configuration Interface** Micro-B USB
- **Mounting** DIN 35 rail, wall, pole
- **Dimension (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** NA: 923MHz (920.80~924.40)
EU: 868MHz (865.20~868.80)
JA: 923MHz (920.80~923.20)
- **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**

WISE2210NA2001-T

WebAccess/SCADA Start Kit with WISE-2210, Proprietary LPWAN (Sub-G) power over CT Wireless Module. Package includes as follow.

- 1 x WISE-2210
- 1 x WISE-4210-AP
- 1 x WebAccess/SCADA 75 tags license key
- 3 x 5~100A current transformer
- 2 x Antenna
- 2 x Mounting bracket
- 1 x Quick start manual
- 1 x 60w adapter
- 1 x 183cm power cord
- 1 x 70 cm Ethernet cable
- 1 x Screwdriver

Ordering Information

Wireless power over CT Module

- **WISE-2210-NA** LPWAN Wireless power over CT Module - EU/NA
- **WISE2210JA2001-T** LPWAN Wireless power over CT Module - JA

Wireless Starter Kit

- **WISE2210NA2001-T** WISE-2210-NA Starter Kit

Wireless Access Point

- **WISE-4210-APNA** LPWAN Wireless to Ethernet AP – EU/NA

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

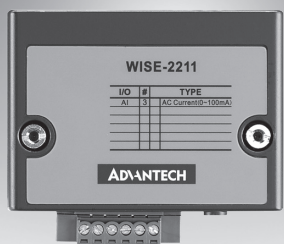
Current Transformer(CT)

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

WISE-2211

Proprietary LPWAN (Sub-G) Wireless power over Analog Input Module

NEW



Features

- Proprietary LPWAN (Sub-G) wireless technology with Less interference with high penetration rate capability
- Power over AI channel design, no extra power wired installation needed.
- High efficiency power charger design via DC input from sensors (DC, 4~20mA)
- Compact design, suitable for plug and play applications

Introduction

Power over analog input channel design with LPWAN technology are ideal for sustainable factory, building applications. Powered by maximum 3 DC output sensors, no cables or batteries are required for switching or for collecting sensor information such as temperature and pressure. The private LPWAN network saves 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-2211 is the proprietary LPWAN which provides better connection compare with traditional wireless technology.

Fast build-in your IoT applications

With power over AI channel design, no wire power installation is needed. WISE-2211 is designing for fast build-in your IoT applications. WISE-2211 can fast connect your sensors, which has DC output, without installation another power source.

High efficiency power charger design

With Advantech's strong hardware and software design capacity, WISE-2211 allows to transmit the power current measurement data in seconds.

Common Specification

Wireless Communication

- **Frequency Band** NA: 923MHz (920.80~924.40)
EU: 868MHz (865.20~868.80)
JA: 923MHz (920.80~923.20)
- **Transmit Power** Up to +12dBm
- **Data Rate** 625bps / 2.5k bps / 5K bps / 50K bps
- **Topology** Star

General

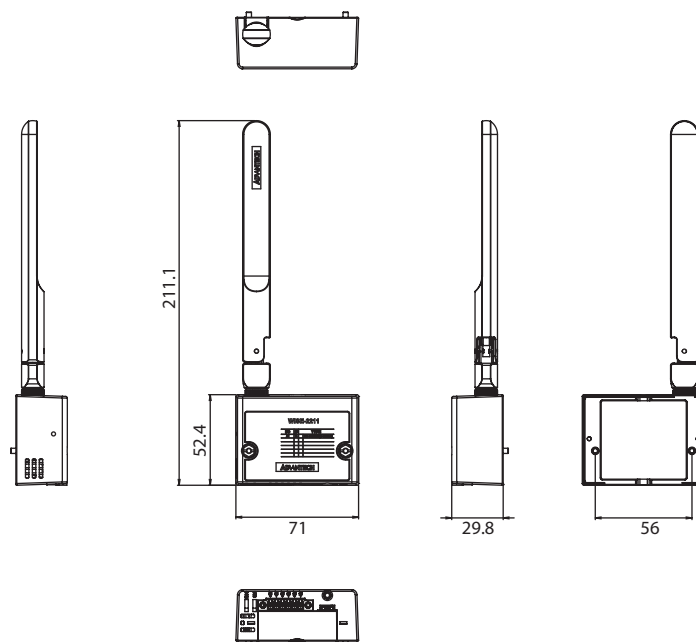
- **Channel** 3 (for sensor, 4-20mA, DC)
- **Input Range** 4~20mA, Direct current
- **Resolution** 11 bits
- **Accuracy** $\pm 0.2\%$ of FSR
- **Drift** 40ppm
- **Power Input** Power source is from AI Channel
- **Configuration Interface** Micro-B USB
- **Mounting** DIN 35 rail, wall, pole
- **Dimension (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** NA: 923MHz (920.80~924.40)
EU: 868MHz (865.20~868.80)
JA: 923MHz (920.80~923.20)
- **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 power over AI module

- **WISE-2211-NA** LPWAN Wireless power over Analog Input Module - EU/NA

Wireless Access Point

- **WISE-4210-APNA** LPWAN Wireless to Ethernet AP – EU/NA

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

WISE-2410

LoRaWAN Wireless Condition Monitoring Sensor

NEW



Features

- LoRaWAN wireless connectivity
- Built-in 3-axis accelerometer and temperature sensor
- On-board computing. Directly sends VRMS, ARMS, Peak, Displacement, Kurtosis, Crest factor, Skewness and Standard Deviation values to applications
- Support battery power supply, no wiring installation needed
- Easy settings with user friendly interfaces on WISE Studio utility
- ISO 10816-3 compliant
- Support wide temperature -20 ~ 80 °C (Battery-powered)
- IP66 enclosure design

Introduction

WISE-2410 is a LoRaWAN wireless condition monitoring sensor integrated with an ARM Cortex-M4 processor, LoRa transceiver, 3-axis accelerometer and temperature sensor. It balances the wireless bandwidth between WISE-2410 and the gateway, so it also mitigates the data transmission fail rates between edge-devices and gateways.

Star Topology

WISE-2410 is a LoRaWAN uses a star network topology and features a gateway data relay function between sensors and the application server. The communication between the sensors and gateway goes over the wireless channel, utilizing the LoRa physical layer, whilst the connection between the gateways and the central server are handled over a backbone IP-based network or over Modbus protocol to the application server.

Computing on Board

With an ARM Cortex-M4 Processor, WISE-2410 enables users to implement more features inside. WISE-2410 is able to calculate more complex eigenvalues itself, such as VRMS, ARMS, Peak, Displacement, Kurtosis, Crest factor, Skewness and Standard Deviation values. With its edge computing capability, WISE-2410 can balance the loading between WISE-2410, gateway, and cloud service.

Plug & Play with 2-year Battery life cycle

WISE-2410 includes two 3.6V AA battery holders. Along with LPWAN technology verified by Advantech, the battery life on WISE-2410 can be up to 2 years with once per hour data update interval time. With IP66 protection design, WISE-2410 is ideal for Low-Power Wide-Area Network (LPWAN) applications, such as pumps, HAVC system, motors, facility monitoring and more. WISE-2410 connects to Advantech's WISE Studio Utility for more user friendly and efficient installation.

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

- **Power Input** 3.6V AA Battery *2pcs (Not included)
- **Battery Life** 2 years (once per hour data update interval time)
- **LED Indicator** Power, Tx
- **Configuration Interface** Micro-B USB
- **IP Class** IP66
- **Mounting** Stud mount, Mounting pad and Adhesives
- **Dimension (H x D)** 84.7 x 48.3 mm
- **Certification** CE (RED), FCC, NCC, TELEC, VCCI, BSMI, RCM, ANATEL

Environment

- **Operating Temperature** -20°C ~ 80°C (Battery powered)
- **Operating Humidity** 10% ~ 95% RH
- **Storage Temperature** -25°C ~ 90°C
- **Storage Humidity** 5% ~ 95% RH

3-Axis Accelerometer Sensor

- **Axis** X-Y-Z
- **Frequency Range** 10~1000Hz
- **Amplitude Range** ±16g
- **Statistical Time-Domain** Velocity RMS, Acceleration (RMS & peak), Displacement, Kurtosis, Crest factor, Skewness, Standard deviation
- **Output Data Rate** 6600Hz
- **Resolution** 10 bit (all g range)
- **Accuracy (FC =100Hz)** Under 5%
- **Noise (MAX. TA = 25°C. 0g)** ±40mg
- **Nonlinearity** ±0.5 %
- **Cross-Axis Sensitivity** ±1 %
- **Sensitivity Change Due to Temperature** ±0.02 %/°C

Temperature Sensor

- **Measurement Range** -20°C ~ 120°C
- **Accuracy** -2°C with 85°C
(TA = 27°C, Directly contact with heat source
(Metal Base of WISE-2410)

Ordering Information

Smart Condition Monitoring Sensor

- **WISE-2410-NB** Wireless Smart Condition Monitoring Sensor - US 902-928 (MHz)

Firmware Image (Optional)

9662410AJ00	WISE-2410-JA Patch
9662410AT00	WISE-2410-TA AS923 Patch
9662410AK00	WISE-2410-KA Patch
9662410AZ00	WISE-2410-ZA AU915 Patch

- **WISE-2410-EB** Wireless Smart Condition Monitoring Sensor - EU 863-870 (MHz)

Firmware Image (Optional)

96632410R00	WISE-2410-RA Patch
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LoRaWAN Gateway

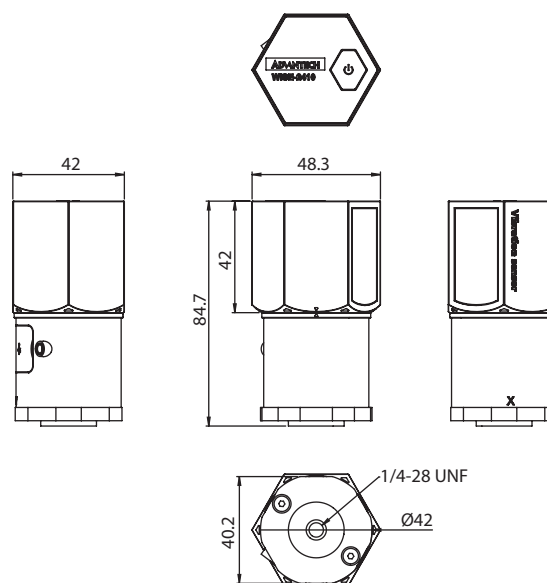
- **WISE-6610-N100-A** LoRaWAN gateway supports up to 100 nodes with 915 MHz
- **WISE-6610-E100-A** LoRaWAN gateway supports up to 100 nodes with 868 MHz
- **WISE-6610-A100-A** LoRaWAN gateway supports up to 100 nodes with 923 MHz

Accessories

- **1760002647-01** Bat.Cylindrical 3.6V/2500mAh AA Li/SOCI2
- **25F7000004N000** Magnet base D30XH9mm for WISE-2410 installation
- **WISE-2410-MTB01** Metal base for WISE-2410 installation

Dimensions

Unit: mm



WISE-2410X

Explosion Proof LoRaWAN Wireless Condition Monitoring Sensor

NEW



Features

- LoRaWAN wireless connectivity
- Built-in 3-axis accelerometer and temperature sensor
- On-board computing. Directly sends VRMS, ARMS, Peak, Displacement, Kurtosis, Crest factor, Skewness and Standard Deviation values to applications
- Support battery power and remote configuration settings, no wiring installation needed
- Easy settings with user friendly interfaces on WISE Studio utility
- ISO 10816-3 compliant
- Support wide temperature 0 ~ 70 °C
- IP65 enclosure design
- IECEx Zone 2, Zone 21, ATEX2 compliant

Introduction

WISE-2410X is an Explosion Proof LoRaWAN wireless condition monitoring sensor integrated with an ARM Cortex-M4 processor, LoRa transceiver, 3-axis accelerometer and temperature sensor. It balances the wireless bandwidth between WISE-2410X and the gateway, so it also mitigates the data transmission fail rates between edge-devices and gateways.

Star Topology

WISE-2410X is a LoRaWAN uses a star network topology and features a gateway data relay function between sensors and the application server. The communication between the sensors and gateway goes over the wireless channel, utilizing the LoRa physical layer, whilst the connection between the gateways and the central server are handled over a backbone IP-based network or over Modbus protocol to the application server.

Computing on Board

With an ARM Cortex-M4 Processor, WISE-2410X enables users to implement more features inside. WISE-2410X is able to calculate more complex eigenvalues itself, such as VRMS, ARMS, Peak, Displacement, Kurtosis, Crest factor, Skewness and Standard Deviation values. With its edge computing capability, WISE-2410X can balance the loading between WISE-2410X, gateway, and cloud service.

Plug & Play with 2-year Battery life cycle

WISE-2410X includes a 3.6V AA battery holders. Along with LPWAN technology verified by Advantech, the battery life on WISE-2410X can be up to 2 years with once per hour data update interval time(with 2 batteries condition only). With IP65 protection design, WISE-2410X is ideal for Low-Power Wide-Area Network (LPWAN) applications, such as pumps, HAVC system, motors, facility monitoring and more. WISE-2410X connects to Advantech's WISE Studio Utility for more user friendly and efficient installation.

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/AS/AU
5.47 kbps at SF7 mode for JP

General

- **Power Input** 3.6V AA Battery (Not included)
(Battery use only Vitzrocell Co., Ltd. SB-AA11,
Li - SOC12, 3.6V, 2.5 Ah)
- **Battery Life** 1 years (Zone21 Condition with 1 battery, once
per 30mins data update interval time)
2 years (Zone2 Condition with 2 batteries, once
per 30mins data update interval time)
- **LED Indicator** Power, Tx
- **Configuration Interface** Micro-B USB
- **IP Class** IP65
- **Mounting** Stud mount, Mounting pad and Adhesives
- **Dimension (H x D)** 84.7 x 63.5 mm
- **Certification** CE (RED), FCC, NCC, TELEC, VCCI, BSMI,
IECEx Zone2, Zone21 (IECEx UL 21.0053X)

Environment

- **Operating Temperature** 0°C ~ 70°C (Battery powered)
- **Operating Humidity** 10% ~ 95% RH
- **Storage Temperature** -25°C ~ 90°C
- **Storage Humidity** 5% ~ 95% RH

3-Axis Accelerometer Sensor

- **Axis** X-Y-Z
- **Frequency Range** 10~1000Hz
- **Amplitude Range** ±16g
- **Statistical Time-Domain** Velocity RMS, Acceleration (RMS & peak),
Displacement, Kurtosis, Crest factor, Skewness,
Standard deviation
- **Output Data Rate** 6.6kHz
- **Resolution** 10 bit (all g range)
- **Accuracy (FC =100Hz)** Under 5%
- **Noise (MAX. TA = 25°C. 0g)** ±40mg
- **Nonlinearity** ±0.5 %
- **Cross-Axis Sensitivity** ±1 %
- **Sensitivity Change Due to Temperature** ±0.02 %/°C

Temperature Sensor

- **Measurement Range** 0°C ~ 70°C
(TA = 25°C)
- **Accuracy** -1°C with 70°C
(TA = 27°C, Directly
contact with heat source
(Metal Base of WISE-2410))

Ordering Information

Smart Condition Monitoring Sensor

- **WISE-2410X-E21NA** Explosion Proof LoRaWAN Smart Vibration Sensor
(IECEx Zeon21 For NA915 Band)
- **WISE-2410X-A02NA** Explosion Proof LoRaWAN Smart Vibration Sensor
(ATEX2 For NA915 Band)

Firmware Image (Optional)

9662410AJ00	WISE-2410-JA Patch
9662410AT00	WISE-2410-TA AS923 Patch
9662410AK00	WISE-2410-KA Patch
9662410AZ00	WISE-2410-ZA AU915 Patch

- **WISE-2410X-A02EA** Explosion Proof LoRaWAN Smart Vibration Sensor
(ATEX2 for EU868 Band)

Firmware Image (Optional)

96632410R00	WISE-2410-RA Patch
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LoRaWAN Gateway

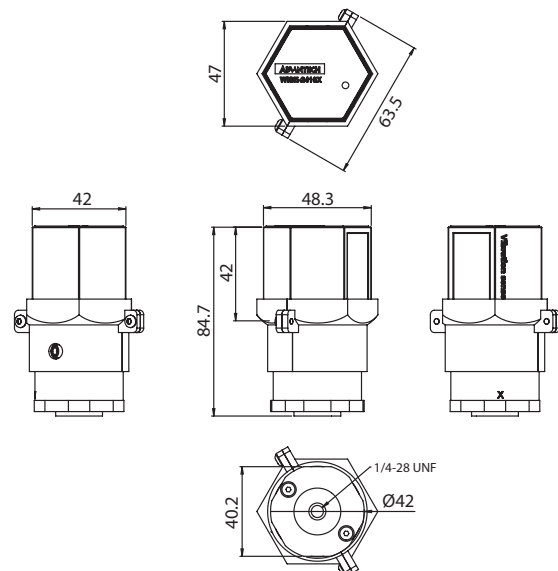
- **WISE-6610-N100-A** LoRaWAN gateway supports up to 100 nodes with
915 MHz
- **WISE-6610-E100-A** LoRaWAN gateway supports up to 100 nodes with
868 MHz
- **WISE-6610-A100-A** LoRaWAN gateway supports up to 100 nodes with 923
MHz

Accessories

- **1760002647-01** Bat.Cylindrical 3.6V/2500mAh AA Li/SOC12
- **25F7000004N000** Magnet base D30XH9mm for WISE-2410X installation
- **WISE-2410-MTB01** Metal base for WISE-2410X installation

Dimensions

Unit: mm



WISE-2834

Intelligent RFID Gateway

NEW



Specification

RFID Communication

- **RFID Standard** EPC Global Class 1 Gen. 2 (ISO18000-6C)
- **Frequency Band** US: 902.75MHz~927.25MHz
EU: 865.7MHz~867.5MHz
CN: 920.625MHz~924.375MHz
JP: 916.8MHz~920.4MHz
- **RFID Power Output** Available to adjust from +10 ~ +31.5dBm
- **Max Receive Sensitivity** -82dBm
- **Antenna Number** 4 port antennas
- **Antenna Connector** 4 RP-TNC

System Hardware

- **Certification** CE, FCC, NCC
- **Power** 10~30V_{DC}
Power consumption: 3W (TYP.), 15W (Max.)
- **Dimension** 190 x 120 x 30.2 mm
- **CPU** ARM Cortex-A8, 300MHz
ARM Cortex-M0 32-Bit 32MHz
- **Storage** NAND Flash 512MB for system
- **Memory** DDR3L 512MB
- **LED Indicator** Status, Serial (Tx, Rx), Wi-Fi communication, RFID Channel on/off, Wi-Fi Signal Strength
- **SD Slot** 1 x Micro SD card
- **USB Port** 1 x USB2.0 High Speed (Up to 480Mbps)
- **Mounting** DIN 35 rail, Wall, and Pole
- **Watch Dog Timer** System & Power Monitor
- **Real Time Clock** Time Accuracy to Second

Communication

- **Ethernet** 1 x 10/100 Based-T RJ-45
- **Serial Port** 1 x RS-485: 50 ~ 115.2 kbps
- **Digital Input** 4 Dry/Wet Contact
- **Digital Output** 4 Sink Type
- **Isolation** 3KV rms
- **Wireless (Optional)** Interface: 1x Mini-PCIe (Full-size)
Type: WiFi

Software

- **OS Support** RT-Linux 3.12
- **Configuration Tool** WISE Studio
- **Programming** Node-RED, Linux OS

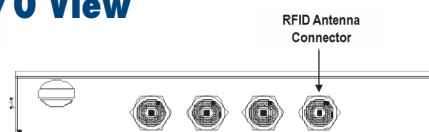
Environment

- **Operating Temperature** -25~ 50°C
- **Operating Humidity** 20~95% RH
- **Storage Temperature** -40~ 85°C
- **Storage Humidity** 0~95% RH

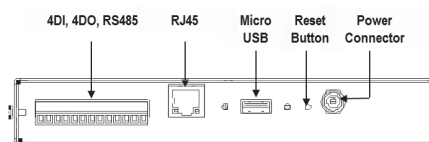
Features

- 4 port UHF RFID Antenna, 4-ch DI and 4-ch DO
- Graphic program tool by Node-RED for data read/write, filtering and transfer
- Support Ethernet and Wi-Fi data communication
- Linux operation system and provide web dashboard for RFID setting
- Data log function and cloud connectivity
- Flexible mounting methods suitable for different environment

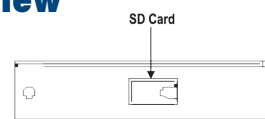
TOP I/O View



Bottom I/O View



Side I/O View



Ordering Information

- **WISE-2834-CA** Intelligent RFID gateway: CN, JP, US

Optional Accessories

WiFi Package

- **96PD-RYUW131** Wi-Fi Half-size mini card, supports 802.11bgn
- **1750008648-01** Dipole Ant. 2.4G SMA/M-R RG174 GRY
- **1750006043** Cable R/P SMA (F) to MHF 1.32 150mm

RFID Antenna

- **96PD-YAP101CP** RFID UHF Antenna, 902~928MHz, Polarization(Right Hand, Circular)
- **96PD-CFD-240-3M** RFID Antenna cable, 3 meter, N-type plug, R/P TNC plug
- **96PD-CFD-240-6M** RFID Antenna cable, 6 meter, N-type plug, R/P TNC plug

Power

- **96PSA-A60W12W7-3** ADP A/D 100-240V 60W 12V C14 LOCKABLE DC PLUG
- **1702002600** Power Cable US Plug 1.8M
- **1700000596-11** Power Cable China Plug 1.8M
- **1702002605** Power Cable EU Plug 1.8M
- **1702031802** Power Cable UK Plug 1.8M