Features

- 2.4GHz Wi-Fi reducing the wiring cost during big data acquisition
- Easily extend the existing network by adding APs, and share existing Ethernet software
- Configured by mobile devices directly without installing any software or Apps
- Zero data loss using the log function with RTC time stamp
- Data can be automatically pushed to Dropbox or computer
- Supports RESTful web API in JSON format for IoT integration

Common Specification

- **WLAN**: IEEE 802.11b/g/n 2.4GHz
- **Outdoor Range**: 110 m with line of sight
- **Connectors**: Plug-in screw terminal block (I/O and power)
- **Watchdog Timer**: System (1.6 second) and Communication (programmable)
- **Dimensions (W x H x D)**: 69 x 102 x 38 mm (without antenna)
- **Enclosure**: PC
- **Mounting**: DIN 35 rail, wall, and stack
- **Power Input**: 10 ~ 50 VDC
- **Power Reversal Protection**: Supported
- **Supports User Defined Modbus Address**: Supported
- **Supports Data Log Function**: Up to 10,000 samples with RTC time stamp
- **Supported Protocols**: Modbus/TCP, TCP/IP, UDP, DHCP, and HTTP
- **Supports RESTful Web API in JSON format**: Supported
- **Supports Web Server in HTML5 with JavaScript & CSS3**: Supported
- **Supports System Configuration Backup and User Access Control**: Supported

Power Unit Monitoring

- **Analog Input**
  - **Channels**: 8
  - **Resolution**: 16-bit
  - **Input Range**: 0 – 10V, 4 – 20mA

Access Control Monitoring

- **Digital Input**
  - **Channels**: 6 (Dry Contact)
  - **Type**: Supports 3kHz Frequency Input
- **Digital Output**
  - **Channels**: 2
- **Serial Port**
  - **Port Number**: 1
  - **Type**: RS-485
  - **Data Bits**: 7, 8
  - **Stop Bits**: 1, 2
  - **Parity**: None, Odd, Even
  - **Baud Rate (bps)**: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
  - **Protocol**: Modbus/RTU (Total 32 address by max. 8 instructions)

Temperature and Humidity Sensors

- **Temperature Sensor**
  - **Operating Range**: -25°C – 70°C (-13°F – 157.9°F)
  - **Resolution**: 0.1 °C/°F/K
  - **Accuracy**: ±1.0°C (±1.8°F) (Vertical Installation)
- **Humidity Sensor**
  - **Operating Range**: 10 – 90% RH
  - **Resolution**: 0.1% RH
  - **Accuracy**: ±4% for 0%–50% RH
  - ±6% for 50%–60% RH
  - ±10% for 60%–90% RH

Temperature Monitoring

- **RTD Input**
  - **Channels**: 4
  - **Input Type**: 2, 3-wire Pt RTD or digital input
  - **Temperature Range**: Pt-100: -200 ~ 200°C
    - Pt-1000: -40 ~ 160°C
  - **Accuracy**: ±0.1% or better

Ordering Information

- **Wireless Sensor Node**
  - **WISE-4220-S215**: WLAN IoT Wireless Sensor Node for Temperature Monitoring
  - **WISE-4220-S217**: WLAN IoT Wireless Sensor Node for Power Unit Monitoring
  - **WISE-4220-S231**: WLAN IoT Wireless Sensor Node with Temperature and Humidity Sensors
  - **WISE-4220-S250**: WLAN IoT Wireless Sensor Node for Access Control Monitoring