ADVANTECH

WISE-4250
Industrial Wireless Wi-Fi 2.4/5 GHz I/O and Sensing Module
Startup Manual

Overview

Thank you for purchasing this WISE-4250 series module. This is a quick guide to help you deploy the WISE-4250 series module in your application field. It includes power and application wiring. If you need more instructions, please refer to the user manual on the Advantech website.

Furthermore, Advantech IoT Academy has produced a series of outstanding free courses, where IoT experts guide you in rapidly acquiring product technical knowledge and developing IoT projects. It is strongly recommended that you view the videos prior to product use. You can find the courses here: https://academy.advantech.com/en/courses

Input Power Requirements

The WISE-4250 series system is designed for a standard industrial unregulated 24 V_{DC} power supply. For some applications, it can also accept +10 to +50 V_{DC} power input, 200mV peak to peak power ripple. The immediate ripple voltage should be between +10 and +50 V_{DC}.

Packaging List

• 1 x WISE-4250 module with bundled antenna and terminal connector
• 1 x Mounting bracket
• 1 x Startup Manual with China RoHS declaration

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

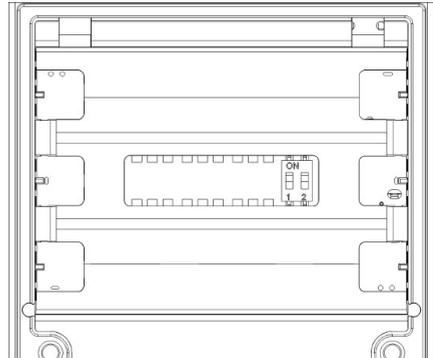For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com

For technical support and service:

http://support.advantech.com/

This Startup Manual is for the WISE-4250 Series.

Switch Settings

| Switch	Description	Position	ON (Default)	OFF
SW1	Operation Mode	P1	Normal Mode	Initial Mode
		P2	N/A	N/A

Note: After position 1 of SW1 has been changed, users need to power on the module again to apply the new operating mode.

Quick Start for WISE-4250

1. Attach a DC power source to the +Vs and -Vs pins of your module to turn on the power.
2. The module can be searched for on a mobile device or wireless adapter or a computer at SSID:WISE-4250-S250_MAC. Click the SSID to connect the module in AP Mode. The WISE module will assign the IP address automatically for mobile devices or a computer.
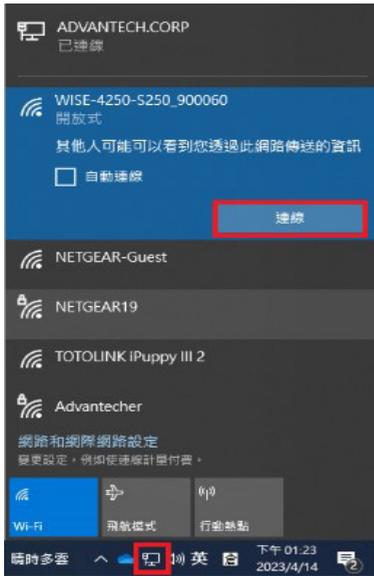
3. Open the browser (Microsoft Edge is recommended), and go to the configuring page URL: http://192.168.1.1/config. Then log in with account: root, and password: 00000000.
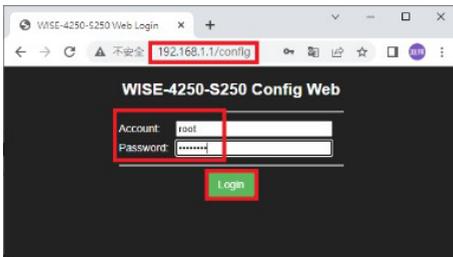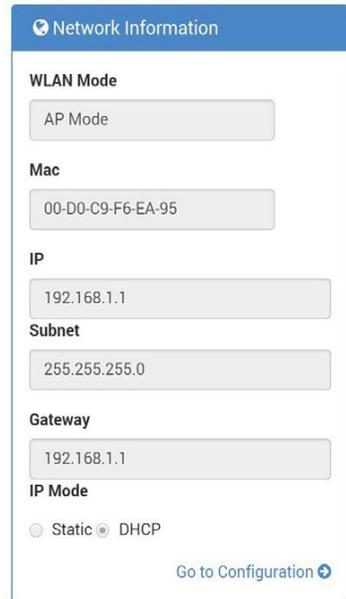
Quick Start for WISE-4250 (Cont.)

4. To enhance system security, please change the password value before continuing.

* Please remember the new password you set. New password cannot be the same as default password value
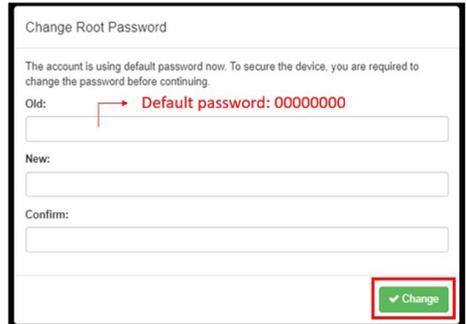
5. Scroll down to what you are going to configure. For example, move down to "Network" and click "Go to Configuration".

LED Indicators

WISE-4250

- **Status (Green)**
  Blinking at 2Hz frequency: the module is waiting for connection.
  Blinking at 0.5Hz frequency: the module is connected.
  Blinking at 30-second intervals indicates the LOCATE function is enabled.
- **Com (Yellow)**
  Blinks when the module is exchanging data.
- **AP/Infra (Green)**
  On: limited mode
  Off: station mode
- **Signal Strength Indicators (Green)**
  Link Quality
  All OFF – Disconnected
  1 ON – Poor
  2 ON – Fair
  3 ON – Good
  4 ON – Very Good

  External board status
  4 Blinking – RF module Failure
  3 Blinking – I/O Failure

Updating the firmware on a WISE-4250 device is a critical process to ensure optimal operation, including the latest features, security patches, and performance improvements.

Software and User Manual

Follow this concise guide:

1. Download the Latest Firmware:

* Visit the Advantech Support website from the following path or QR-Code:

https://www.advantech.com/support

* Locate the WISE-4250 product page.

* Download the firmware file to your computer. You may also find the latest datasheet, user's manual, and software installation package on this page.

2. Prepare Your Device
3. Access the Device Interface
4. Initiate Firmware Upload
5. Execute the Upgrade
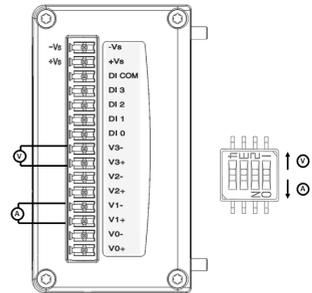6. Verify the Update

Application Wiring

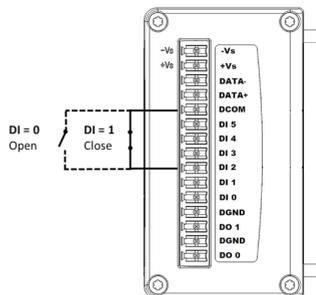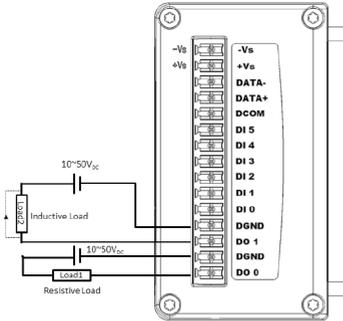### WISE-S214 (4AI/4DI)

Digital Input- Dry Contact
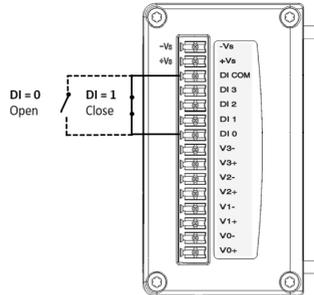
Analog Input

WISE-S250 (6DI/2DO/1RS-485)

Digital Input-Dry Contact
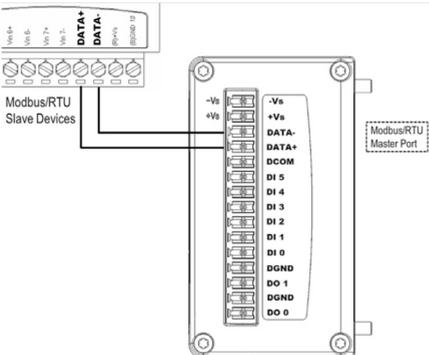
Digital Output

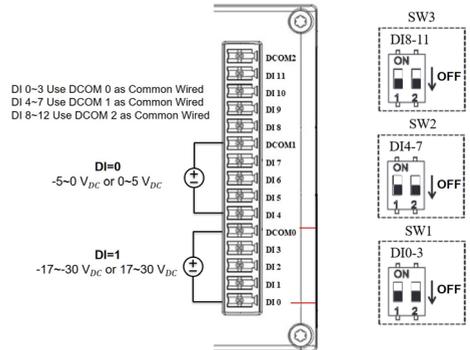

RS-485 Port

WISE-S251 (6DI/1RS-485)

Digital Input – Dry Contact
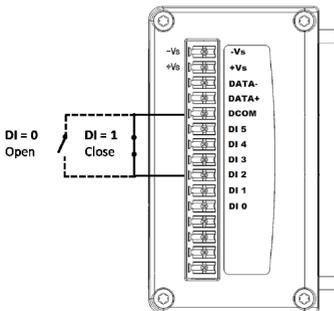
RS-485 Port
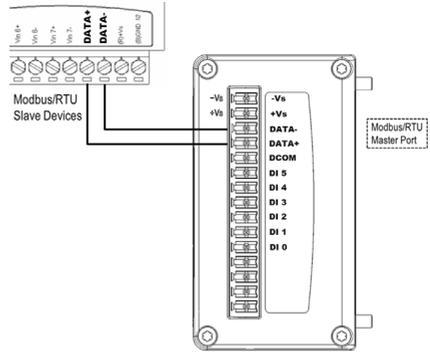
WISE-S252 (12DI/12DO)

Digital Input – Dry Contact
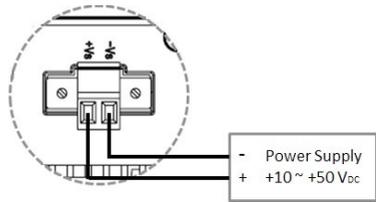
Digital Input – Wet Contact

Digital Output
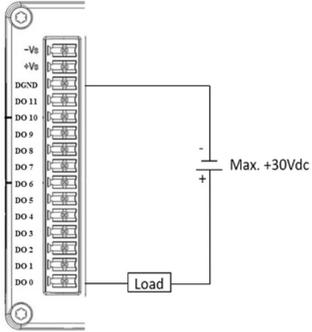
WISE-S232 (Temperature and Humidity Sensor)