

# WISE-4000/LAN Series

## IoT Ethernet I/O Module



### Main Features

- Supports new web service that pushes data instantly to the cloud
- Supports file-based cloud storage for data logging and buffering
- Supports portable device web configuration, and also group deployment
- Industrial grade operating temperature -40~70°C
- Tag-based web service design enables device plug-n-play

## Introduction

The WISE-4000/LAN series provide a cost-effective solution for cloud applications. By supporting direct cloud access, new web service and datalog, the WISE-4000/LAN series can seamlessly connect to cloud for an Ethernet solution.

## Specifications

### Current Input

- **Channel** WISE-4010: 4 (differential)
- **Resolution** 12-bit
- **Sampling Rate** 10/100/1000 Hz/channel
- **Accuracy**  $\pm 0.2\%$  of FSR @ 25°C
- **Input Range** 0~20 mA, 4~20 mA
- **Input Impedance** 120  $\Omega$
- **Burn-out Detection** Yes (4~20 mA only)
- **Supports Data Scaling and Averaging**

### Digital Input

- **Channels** WISE-4050: 4  
WISE-4060: 4
- **Logic level:** Dry Contact 0: Open  
1: Close to DI COM  
Wet Contact 0: 0 ~ 3 V<sub>DC</sub> (0.8 mA max.)  
1: 10 ~ 30 V<sub>DC</sub> (3 mA min.)
- **Isolation** 3,000 V<sub>rms</sub>
- **Supports 3 kHz Counter Input (32-bit + 1-bit overflow)**
- **Keep/Discard Counter Value when Power-off**
- **Supports 3 kHz Frequency Input**
- **Supports Inverted DI Status**

### Digital Output

- **Channels** WISE-4010: 4  
WISE-4050: 4  
(Open collector to 30 V, 500 mA max. for resistance load)
- **Isolation** 3,000 V<sub>rms</sub> (WISE-4050 only)
- **On Resistance (R<sub>DS(ON)</sub>)** 0.3  $\Omega$  (max.) @ 500mA, 25°C
- **Supports 1 kHz Pules Output**
- **Supports High-to-Low and Low-to-High Delay Output**

### Relay Output

- **Channels** WISE-4060: 4 (Form A)
- **Contact Rating** 250 V<sub>AC</sub> @ 5 A  
30 V<sub>DC</sub> @ 3 A
- **Isolation** 3,000 V<sub>rms</sub>
- **Relay On Time** 10 ms
- **Relay Off Time** 5 ms
- **Insulation Resistance** 1 G $\Omega$  min. @ 500 V<sub>DC</sub>
- **Maximum Switching** 60 operations/minute
- **Supports Pulse Output**
- **Supports High-to-Low and Low-to-High Delay Output**

### Environment

- **Operating Temperature** -40 ~ 70°C (-40~158°F)
- **Storage Temperature** -40 ~ 85°C (-40~185°F)
- **Operating Humidity** 20 ~ 95% RH (non-condensing)
- **Storage Humidity** 0 ~ 95% RH (non-condensing)

### General

- **LAN** IEEE 802.3u 10/100Base-T(X)
- **Connectors** Plug-in screw terminal block (I/O and power)
- **Watchdog Timer** System (1.6 second) and Communication (programmable)
- **Certification** CE, FCC, RoHS
- **Dimensions (W x H x D)** 80 x 89 x 25 mm
- **Enclosure** PC
- **Mounting** DIN 35 rail, wall, and stack
- **Power Input** 10 ~ 30 V<sub>DC</sub>
- **Power Consumption** WISE-4010/LAN: 1.2 W @ 24 V<sub>DC</sub>  
WISE-4050/LAN: 2.2 W @ 24 V<sub>DC</sub>  
WISE-4060/LAN: 2.5 W @ 24 V<sub>DC</sub>
- **Power Reversal Protection**
- **Supports User Defined Modbus Address**
- **Supported Protocols** Modbus/TCP, TCP/IP, UDP, DHCP, and HTTP
- **Supported Web Services** REST, HTML 5, Java Script, JSON
- **Supports System Configuration Backup and User Access Control**

## Ordering Information

- **WISE-4010/LAN** 4-ch Current Input and 4-ch Digital Output IoT Ethernet I/O Module
- **WISE-4050/LAN** 4-ch Digital Input and 4-ch Digital Output IoT Ethernet I/O Module
- **WISE-4060/LAN** 4-ch Digital Input and 4-ch Relay Output IoT Ethernet I/O Module

### Selection Table

Model Name	Current Input	Digital Input	Digital Output	Relay Output
WISE-4010/LAN	4		4	
WISE-4050/LAN		4	4	
WISE-4060/LAN		4		4