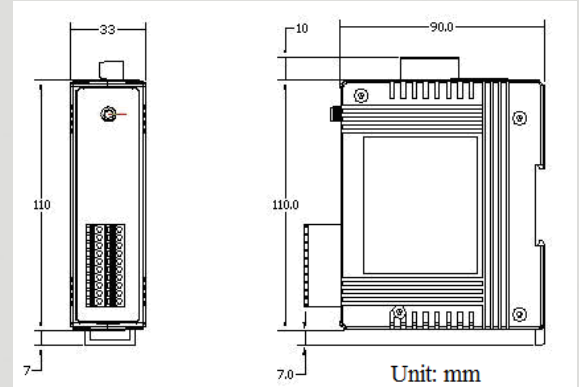# Wi-Fi Series Products

Wi-Fi Data Acquisition I/O Module (8DI / 8DO)

RoHS CE FC

WF-2055

Dimensions

Unit: mm

The WF-2055 is an 8-channel isolated digital input with 32-bit counters and 8-channel sink type isolated digital output module and it is one of the members of the WF-2000 wireless product family. In addition, the WF-2055 has WLAN connection complies with the IEEE802.11b/g standards. With the popularity of 802.11 network infrastructure, the WF-2055 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2055 also supports Modbus/TCP and UDP protocols and the network encryption configuration, which makes perfect integration to SCADA software and offer easy and safe access for users from anytime and anywhere.

Features

- Support sink type digital outputs
- Support sink / source type digital inputs
- Compatible with IEEE 802.11b/g standards
- Support infrastructure and ad hoc modes for wireless networks
- Support WEP, WPA and WPA2 wireless encryption
- Support Modbus/TCP and UDP protocols
- Support pair connection mode
- Support DO power on value & safe value Mechanism
- Built-in Watchdog
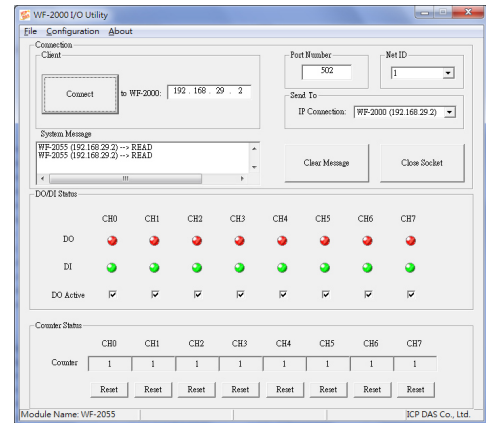
Utility Features

WF-2000 I/O Utility provides a simple way to easily test and instant acquire data for all ICP DAS Wi-Fi I/O series modules without programming

- Easily and quickly configure and test Wi-Fi I/O modules
- Provide I/O monitor screen
- Provide parameter storage interface
- Provide encryption configuration for wireless LAN

Wire Connection

Input	ON	OFF
Relay Contact (Dry)	Relay Close — DIx / GND	Relay Open — DIx / GND
Open Collector (Dry)	ON — DIx / GND	OFF — DIx / GND
Relay Contact (Wet)	+ — DIx.COM / DIx — Relay Close	− — DIx.COM / DIx — Relay Open
NPN Output (Wet)	ON — DI.COM / DIx	OFF — DI.COM / DIx

Output	ON	OFF
Drive Relay	Ext.PWR / DOx / Ext.GND	Ext.PWR / DOx / Ext.GND
Resistance Load	Ext.PWR / DOx / Ext.GND	Ext.PWR / DOx / Ext.GND

ICP DAS Professional Provider of High Quality Industrial Data Acquisition and Control Products

Hardware Specifications

Digital Input			
Channels	8		
Input Type	Dry Contact: Source, Wet Contact: Sink / Source		
Dry Contact Level	Off Voltage Level: Open	On Voltage Level: Close to GND	
Wet Contact Level	Off Voltage Level: +4V max.	On Voltage Level: +10 V ~ +50 V	
Counters	Channels	8	
	Max. Counts	32-bit (4294967295)	
	Max. Input Frequency	10K Hz	
Photo-Isolation	3750 VDC		
Digital Output			
Channels	8, Sink(NPN)		
Output Voltage	+3.5 ~ +50 V		
Output Current	700mA per channel		
Intra-module Isolation, Field to Logic	3750 VDC		
Overvoltage Protection	60 VDC		
Wi-Fi Interface			
Antenna	5 dBi (Omni-Directional)		
Output Power	8　dBm @ 11Mbps		
Receive Sensitivity	-83 dBm @ 11Mbps		
Standard Supported	IEEE 802.11b/g		
Wireless Mode	Infrastructure & Ad-hoc		
Encryption	WEP, WPA and WPA2		
Transmission Range	50 meters (LOS)		
Power			
Input Voltage Range	10V ~ 30V		
Power Consumption	1.9W		
Mechanism			
Installation	DIN-Rail		
Dimensions	33mm x106mm x 120mm (W x L x H)		
Environment			
Operating Temperature	-25℃ ~ +75℃		
Storage Temperature	-30℃ ~ +80℃		
Humidity	10% ~ 90%		

Applications

Connection architecture
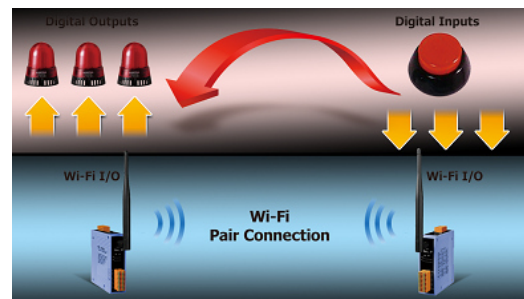
I/O Pair Connection

Ordering Information

WF-2055 CR	Wi-Fi I/O Module with 8-channel Isolated Digital Input and 8-channel Sink Type Isolated Digital Output (RoHS)