



## WFM-R14

Wi-Fi I/O Module with 14-ch Power Relay, Metal Case (Asia Only)

### Features

- Support Form A and Form C Relay type digital outputs
- Configurable Power-on and Safe Value Settings
- Compatible with IEEE 802.11b/g standards
- Support WEP, WPA and WPA2 wireless encryption
- Support Modbus TCP protocols
- Support DHCP network configuration
- Support pair connection mode
- ±4 kV Contact ESD Protection
- Built-in Watchdog



### Introduction

The WFM-R14 is a 14-channel relay output module with Metal Case (RoHS) which includes stronger protection. In addition, the WFM-R14 has WLAN connection complies with the IEEE802.11b/g standards.

With the popularity of 802.11 network infrastructure, the WFM-R14 makes an easy way to incorporate wireless connectivity into monitoring and control systems.

The WFM-R14 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.

### System Specifications

Wi-Fi		
Transmission Range	50 meters (LOS)	
Standards	IEEE 802.11 b/g (non-RevB version) IEEE 802.11 b/g/n (RevB version)	
Receive Sensitivity	-83 dBm @ 11 Mbps (non-RevB version) -93 dBm @ 11 Mbps (RevB version)	
Output Power	8 dBm @ 11 Mbps (non-RevB version) 14 dBm @ 11 Mbps (RevB version)	
Mode	Infrastructure & Ad-hoc	
Encryption	WEP, WPA and WPA2	
Antenna	5 dBi (Omni-Directional)	
Power		
Input Range	+10 Vdc ~ +30 Vdc	
Consumption	2.2 W	
Mechanical		
Dimensions (W x L x H)	DIN-rail mounting	73 mm x 118 mm x 111 mm (Without antenna)
	Wall mounting	73 mm x 132 mm x 111 mm (Without antenna)
Installation	DIN-Rail Mounting or Wall mounting	
Environmental		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

### I/O Specifications

Relay Output	
Channels	14 (2 x Form A, 12 x Form C)
Type	Power Relay
Contact Rating	Form A: 5 A 250 VAC/30 Vdc 6 A 250 VAC/30 Vdc
Operate Time	Form A: 10 ms Form C: 8 ms
Release Time	Form A: 5 ms Form C: 4 ms
Electrical Endurance	1 x 100000 times 3 A 250 VAC/30 Vdc 5 x 10000 times 5 A 250 VAC/30 Vdc 1A: 6 x 10000 times 1C: (NO) 3 x 10000 times 1C: (NC) 1 x 10000 times
Mechanical Endurance	Form A: 2 x 1000000 times Form C: 1 x 1000000 times

### 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 encryption configuration for wireless LAN

## Applications



## Wire Connections

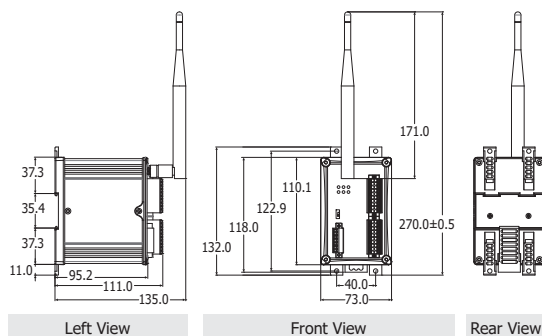
Relay Output	ON State Readback as 1	OFF State Readback as 0
Form A		
Form C		

## Pin Assignments

CN2				
Type	Pin Assignment	Terminal No.	Pin Assignment	Type
Form C	NO3	20	19	NO0
	NC3	18	17	NC0
	COM3	16	15	COM0
	NO4	14	13	NO1
	NC4	12	11	NC1
	COM4	10	09	COM1
	NO5	08	07	NO2
	NC5	06	05	NC2
Form A	COM5	04	03	COM2
	COM12	02	01	NO12

CN3				
Type	Pin Assignment	Terminal No.	Pin Assignment	Type
Form C	NO9	20	19	NO6
	NC9	18	17	NC6
	COM9	16	15	COM6
	NO10	14	13	NO7
	NC10	12	11	NC7
	COM10	10	09	COM7
	NO11	08	07	NO8
	NC11	06	05	NC8
Form A	COM11	04	03	COM8
	COM13	02	01	NO13

## Dimensions (Units: mm)



## Ordering Information

<b>WFM-R14 CR</b>	Wi-Fi I/O Module with 14-ch Power Relay, Metal Case (Asia Only) (RoHS) Includes ANT-124-05 Antenna, CA-0910 Cable and 4SNPNA010021G Wall mount
-------------------	---

## Accessories

	3S001-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 1 M (RoHS)
	3S003-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 3 M (RoHS)
	3S005-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 5 M (RoHS)
	3S008-1 CR	Antenna Extension Cable, RG58A/U, RP-SMA Male to RP-SMA Female, 8 M (RoHS)
	ANT-8 CR	8 dBi, 2.4 GHz omni-directional antenna (RP SMA Male Plug) (RoHS)
	ANT-15 CR	15 dBi, 2.4 GHz omni-directional antenna (RP SMA Male Plug) (RoHS)
	ANT-15YG-1 CR	15 dBi, 2.4 GHz directional yagi antenna (RP SMA Male Plug) (RoHS) Includes 3S004 Cable (HDF 200 cable, N type male to RP-SMA male, 1 M)
	ANT-18 CR	18 dBi, 2.4 GHz directional panel antenna (RP SMA Male Plug) (RoHS)
	ANT-21 CR	21 dBi, 2.4 GHz directional grid antenna (RP SMA Male Plug) (RoHS)
	ANT-124-03 CR	3 dBi, 2.4 GHz omni-directional antenna (RP SMA Male Plug) (RoHS)