

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

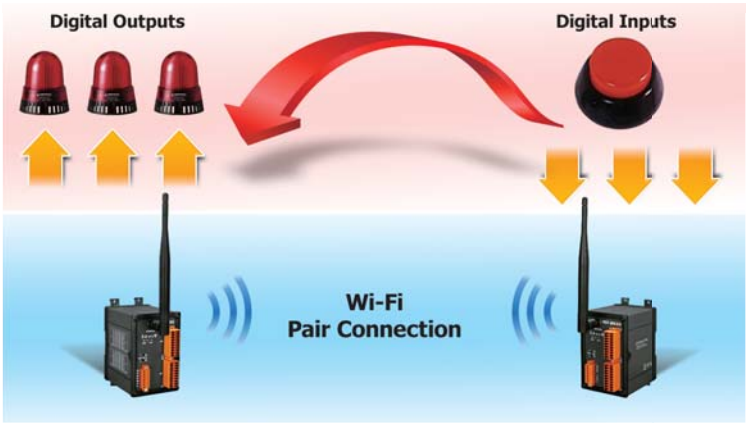
WF-2000 I/O Utility provides a simple way to easily test and instant acquire data for all ICP DAS Wi-Fi I/O series modules without programming.

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

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Applications





Pin Assignments

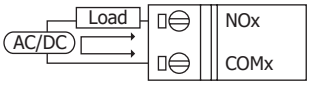
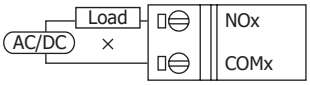
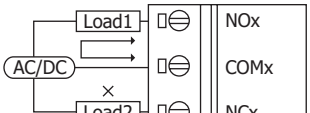
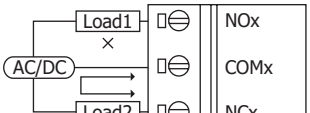
CN2

Type	Pin Assignment	Terminal No.		Pin Assignment	Type
Form C	NO3	20	19	NO0	Form C
	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	
	COM5	04	03	COM2	
Form A	COM12	02	01	NO12	Form A

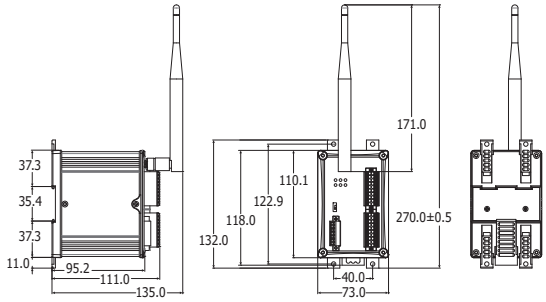
CN3

Type	Pin Assignment	Terminal No.		Pin Assignment	Type
Form C	NO9	20	19	NO6	Form C
	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	
	COM11	04	03	COM8	
Form A	COM13	02	01	NO13	Form A

Wire Connections

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

Dimensions (Units: mm)



Left View | Front View | Rear View

Ordering Information

WFM-R14 CR	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)

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000