

WF-2042

Wi-Fi I/O Module with Isolated 16-ch DO (Asia Only)

Features

- Support sink type digital output
- Compatible with IEEE 802.11b/g standards
- Support Infrastructure and Ad hoc modes
- Support Modbus/TCP and UDP protocols
- Support DHCP network configuration
- Support pair connection mode
- Support DO power on value & safe value mechanism
- Built-in Watchdog
- Wide Operating Temperature Range
- 4kV ESD Protection

Introduction

The WF-2042 is a 16-channel isolated digital output module and it is one of the members of the WF-2000 wireless product family. In addition, the WF-2042 has WLAN connection complies with the IEEE802.11b/g standards. With the popularity of 802.11 network infrastructure, the WF-2042 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2042 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

Isolation	
Intra-module Isolation	3750 VDC
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 (non-RevB version) Infrastructure & Limit-AP (RevB version)
Encryption	WEP, WPA and WPA2
Antenna	5 dBi (Omni-Directional)
Power	
Input Range	+10 VDC ~ +30 VDC
Consumption	1.2 W
Mechanical	
Dimensions (W x L x H)	33 mm x 127 mm x 107 mm (Without antenna)
Installation	DIN-Rail Mounting
Environmental	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +80 °C
Humidity	10 ~ 90% RH, Non-condensing

I/O Specifications

Digital Output	
Channels	16
Type	Open Collector
Sink/Source (NPN/PNP)	Sink (NPN)
Load Voltage	+3.5 ~ +50 V
Max. Load Current	700 mA per channel
Overvoltage Protection	60 VDC

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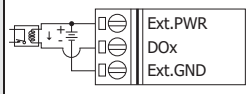
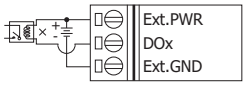
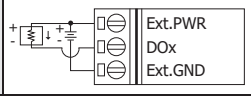
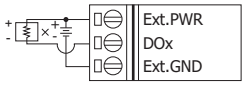
Applications



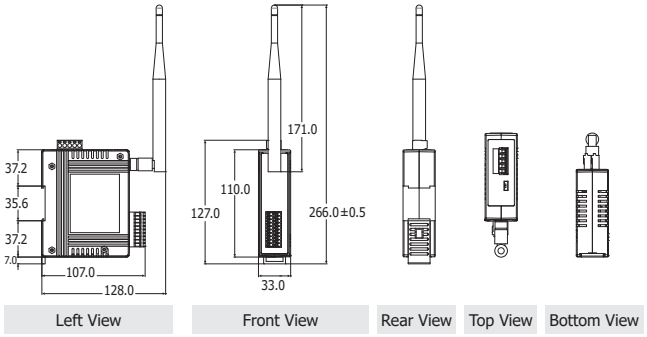
Pin Assignments

Pin Assignment	Terminal No.		Pin Assignment
EXT.GND	20	19	EXT.GND
DO8	18	17	DO0
DO9	16	15	DO1
DO10	14	13	DO2
DO11	12	11	DO3
DO12	10	09	DO4
DO13	08	07	DO5
DO14	06	05	DO6
DO15	04	03	DO7
EXT.PWR	02	01	EXT.PWR

Wire Connections

Output Type	ON State LED ON	OFF State LED OFF
	Relay ON	Relay OFF
Drive Relay		
Resistance Load		

Dimensions (Units: mm)



Left View | Front View | Rear View | Top View | Bottom View

Ordering Information

WF-2042 CR	Wi-Fi I/O Module with Isolated 16-ch DO (Sink, NPN) (Asia Only) (RoHS) Includes ANT-124-05 Antenna and CA-0910 Cable

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)

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