

WF-2017

Wi-Fi I/O Module with 8-ch/16-ch AI (Asia Only)

Features

- 8-channel Differential Analog Input
- 16-channel Single-ended Analog Input
- Compatible with IEEE 802.11b/g standards
- Support WEP, WPA and WPA2 wireless encryption
- Support Modbus/TCP and UDP protocols
- Support DHCP network configuration
- Wide Operating Temperature Range
- 4 kV ESD Protection
- Built-in Watchdog

Introduction

The WF-2017 is a Wi-Fi interface and 8-channel Differential/16-channel Single-Ended analog input module. The analog input range is software selectable and supports +/-10V, +/-5V, +/-1V, +/-500 mV, +/-150 mV, and +/-20 mA. Differential and Single-ended mode is selected by jumpers. In addition, the WF-2017 has WLAN connection complies with the IEEE802.11b/g standards. With the popularity of 802.11 network infrastructure, the WF-2017 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2017 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	3000 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	2.2 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

Analog Input		
Channels		8-ch Differential / 16-ch Single-ended (Note), (Jumper Selectable)
Type		Voltage Current
Range	Voltage	±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V
	Current	0 ~ +20 mA, +4 ~ +20 mA, ±20 mA (Jumper Selectable)
Resolution		16-bit
Accuracy		±0.1% of FSR
Sampling Rate		10 Hz (Total)
Input Impedance	Differential	2 MΩ
	Single-ended	1 MΩ
Common Mode Rejection		86 dB Min.
Normal Mode Rejection		100 dB
Overvoltage Protection	Differential	240 Vrms (2 MΩ)
	Single-ended	150 Vrms (1 MΩ)
Individual Channel Configuration		Yes
Zero Drift		±20 μV/°C
Span Drift		±25 ppm/°C

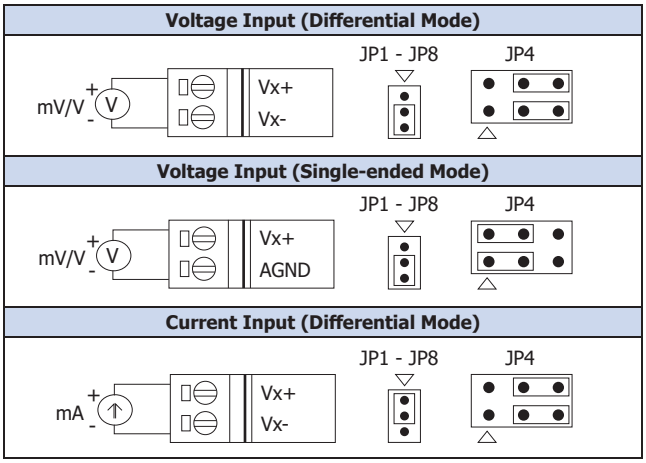
Note: Differential mode can be used for voltage input and current input. Single-Ended mode can be used for voltage input only.

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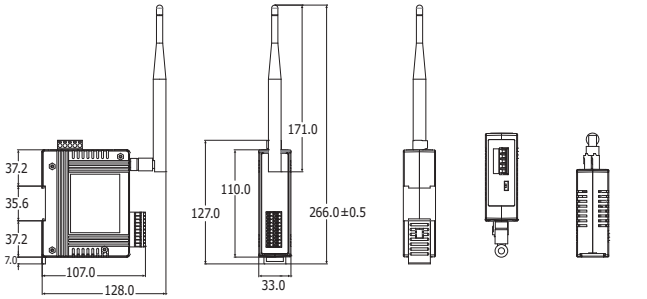
Applications



Wire Connections



Dimensions (Units: mm)



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

Pin Assignments

Pin Assignment		Terminal No.		Pin Assignment
V0-/V8+	20		19	V0+
V1-/V9+	18		17	V1+
V2-/V10+	16		15	V2+
V3-/V11+	14		13	V3+
V4-/V12+	12		11	V4+
V5-/V13+	10		09	V5+
V6-/V14+	08		07	V6+
V7-/V15+	06		05	V7+
AGND	04		03	AGND
AGND	02		01	AGND

Ordering Information

WF-2017 CR	Wi-Fi I/O Module with 8-ch/16-ch AI (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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