



## 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

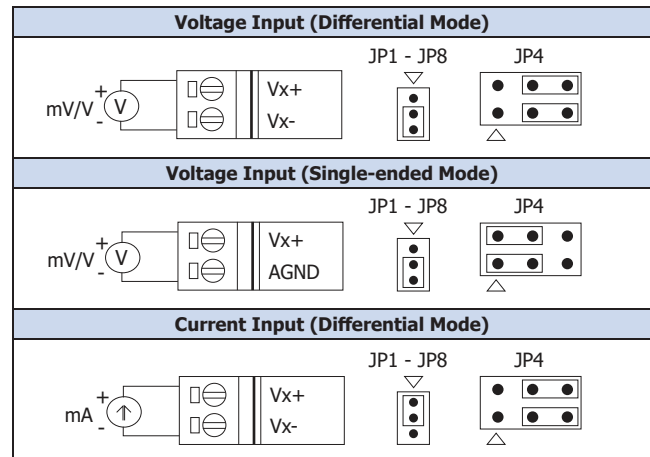
Analog Input		
Channels	8-ch Differential / 16-ch Single-ended (Note), (Jumper Selectable)	
Type	Voltage Current	
Range	Voltage	±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V
	Current	0 ~ +20 mA, +4 ~ +20 mA, ±20 mA (Jumper Selectable)
Resolution	16-bit	
Accuracy	±0.1% of FSR	
Sampling Rate	10 Hz (Total)	
Input 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.

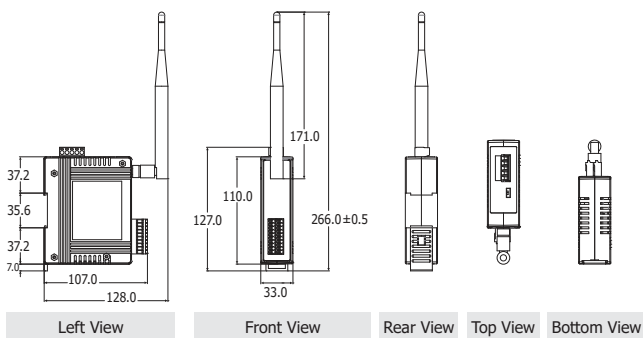
## Applications



## Wire Connections



## Dimensions (Units: mm)



## 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

<b>WF-2017 CR</b>	Wi-Fi I/O Module with 8-ch/16-ch AI (Asia Only) (RoHS) Includes ANT-124-05 Antenna and CA-0910 Cable
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## 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)