

WF-2015

Wi-Fi I/O Module with 6-ch RTD Input (Asia Only)

Features

- 6-channel RTD Input
- 3-wire RTD Input with Lead Resistance Elimination
- Open Wire Detection
- Individual Channel Configuration
- Compatible with IEEE 802.11b/g standards
- Support WEP, WPA and WPA2 wireless encryption
- Support Modbus/TCP and UDP protocols
- Support DHCP network configuration
- 4 kV ESD/EFT Protection
- 3000 VDC Intra-module Isolation
- Built-in Watchdog

Introduction

The WF-2015 is a Wi-Fi interface and 6-channel RTD input module for long-distance temperature measurement, and features automatic compensation for three-wire RTD sensor, meaning that accurate measurements can be obtained regardless of the length of the wires. With the popularity of 802.11 network infrastructure, the WF-2015 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2015 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	1.44 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	6
Type	RTD
Sensor Type	Pt100, Pt1000, Ni120, Cu50, Cu100, Cu1000
Resistance Measurement	3.2 kΩ Max.
Resolution	16-bit
Accuracy	±0.05% of FSR
Sampling Rate	12 Hz (Total)
Overvoltage Protection	+120 VDC
Individual Channel Configuration	Yes
Open Wire Detection	Yes
3-wire RTD Lead Resistance Elimination	Yes

RTD Type Settings (TT)

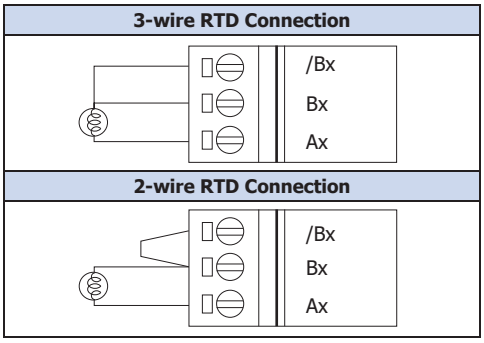
Type Code	RTD Type	Temperature Range
20	Platinum 100, α= 0.00385	-100 ~ +100 °C
21	Platinum 100, α= 0.00385	0 ~ +100 °C
22	Platinum 100, α= 0.00385	0 ~ +200 °C
23	Platinum 100, α= 0.00385	0 ~ +600 °C
24	Platinum 100, α= 0.003916	-100 ~ +100 °C
25	Platinum 100, α= 0.003916	0 ~ +100 °C
26	Platinum 100, α= 0.003916	0 ~ +200 °C
27	Platinum 100, α= 0.003916	0 ~ +600 °C
28	Nickel 120	-80 ~ +100 °C
29	Nickel 120	0 ~ +100 °C
2A	Platinum 1000, α= 0.00385	-200 ~ +600 °C
2B	Cu 100 at 0 °C, α= 0.00421	-20 ~ +150 °C
2C	Cu 100 at 25 °C, α= 0.00427	0 ~ +200 °C
2D	Cu 1000 at 0°C, α= 0.00421	-20 ~ +150 °C
2E	Platinum 100, α= 0.00385	-200 ~ +200 °C
2F	Platinum 100, α= 0.003916	-200 ~ +200 °C
80	Platinum 100, α= 0.00385	-200 ~ +600 °C
81	Platinum 100, α= 0.003916	-200 ~ +600 °C
82	Cu 50 at 0 °C	-50 ~ +150 °C
83	Nickel 100	-60 ~ +180 °C

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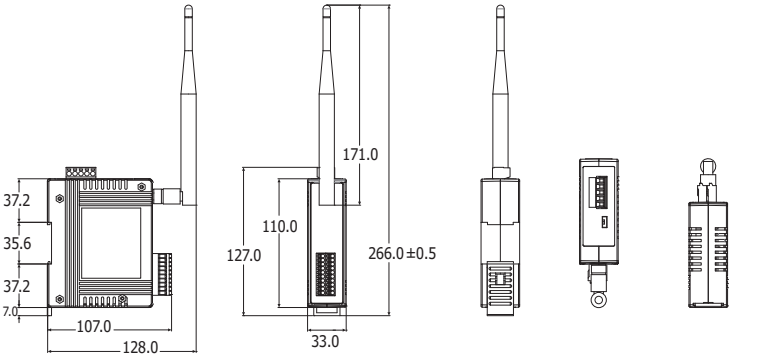
Applications



Wire Connections

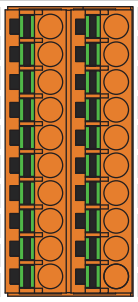


Dimensions (Units: mm)



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

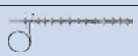
Pin Assignments

Pin Assignment	Terminal No.		Terminal No.	Pin Assignment
A3	20		19	A0
B3	18		17	B0
/B3	16		15	/B0
A4	14		13	A1
B4	12		11	B1
/B4	10		09	/B1
A5	08		07	A2
B5	06		05	B2
/B5	04		03	/B2
N/A	02		01	N/A

Ordering Information

WF-2015 CR	Wi-Fi I/O Module with 6-ch RTD Input (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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