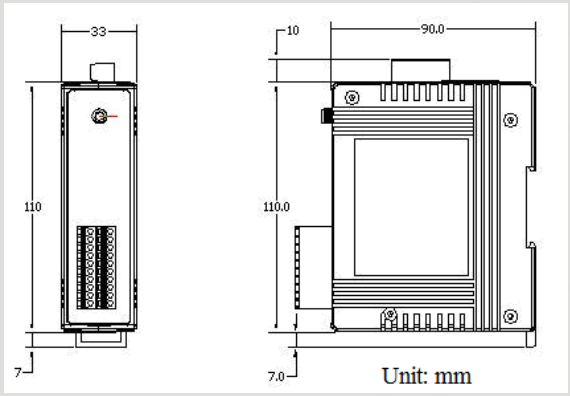
Wi-Fi Series Products

Wi-Fi Data Acquisition I/O Module (6 RTD)

WF-2015



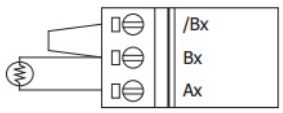
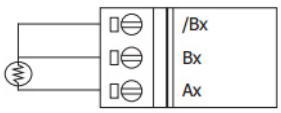
Dimensions

The WF-2015 is a 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.

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

Wire Connection

2-wire RTD Wire Connection	3-wire RTD Wire Connection
	

Pin Assignment

Pin Assignment Name		Terminal No.		Pin Assignment Name
A3	20		19	A0
B3	18		17	B0
/B3	16		15	/B0
A4	14		13	A1
B4	12		11	B1
/B4	10		9	/B1
A5	8		7	A2
B5	6		5	B2
/B5	4		3	/B2
N/A	2		1	N/A

RTD Type Settings

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

Hardware Specifications

Analog Input	
Channels	6
Wiring	2/3-wire
Sensor Types	Pt100, Pt1000, Ni120, Cu50, Cu100, Cu1000
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
Resistance Measurement	3.2 kΩ Max.
Wi-Fi Interface	
Antenna	5 dBi (Omni-Directional)
Output Power	8 dBm @ 11Mbps
Receive Sensitivity	-83 dBm @ 11Mbps
Standard Supported	IEEE 802.11b/g
Wireless Mode	Infrastructure & Ad-hoc
Encryption	WEP, WPA and WPA2
Transmission Range	50 meters (LOS)
Isolation	
Intra-module Isolation, Field-to-Logic	3000 VDC
Power	
Input Voltage Range	10 ~ 30 VDC
Power Consumption	1.44W
Mechanism	
Installation	DIN-Rail
Dimensions	33mm x 106mm x 120mm (W x L x H)
Environment	
Operating Temperature	-25℃ ~ +75℃
Storage Temperature	-30℃ ~ +80℃
Humidity	10% ~ 90% RH, Non-condensing

Applications

Ordering Information

WF-2015 CR	6-channel RTD Input Wi-Fi I/O Module (RoHS)