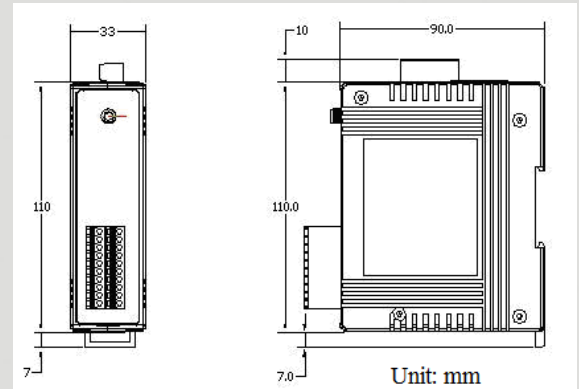




Wi-Fi Data Acquisition I/O Module (5AI/2AO/2DI/3DO)



WF-2026



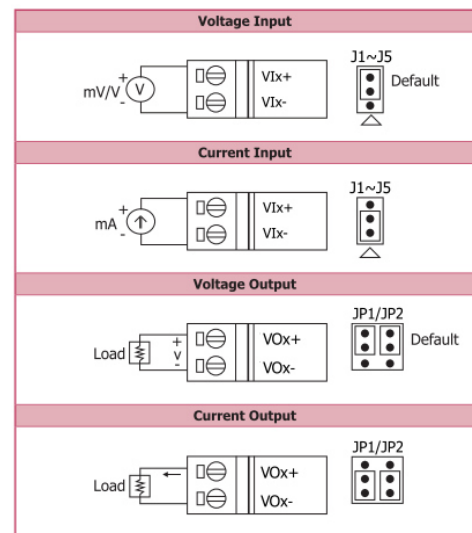
Dimensions

The WF-2026 is a multifunction module with Wi-Fi interface that includes 5 AI, 2 AO, 2 DI and 3 DO. It provides a programmable input/output range on all analog input and output. Each analog input and output channel can be configured for an individual range. Analog Input and output can be jumper selectable as either voltage or current. With the popularity of 802.11 network infrastructure, the WF-2026 makes an easy way to incorporate wireless connectivity into monitoring and control systems. The WF-2026 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

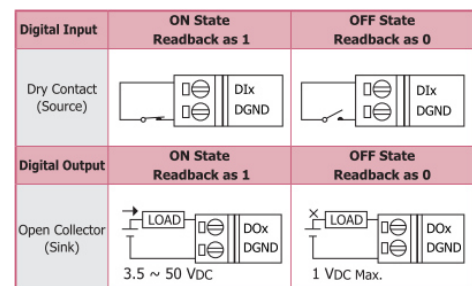
- Multifunction (5 AI, 2 AO, 2 DI and 3 DO)
- Individual Channel Configuration
- Jumper Selectable Voltage or Current Input/Output
- Compatible with IEEE 802.11b/g standards
- Support WEP, WPA and WPA2 wireless encryption
- Support Modbus/TCP and UDP protocols
- Support DHCP network configuration
- Support DO/AO power on value & safe value mechanism
- Overload and Short Circuit Protection for Digital Output
- 240 Vrms Overvoltage Protection for Voltage Input
- 4 kV ESD Protection
- Built-in Watchdog

Wire Connection



Pin Assignment

Pin Assignment Name	Terminal No.	Pin Assignment Name
VI0-	20	VI0+
VI1-	18	VI1+
VI2-	16	VI2+
VI3-	14	VI3+
VI4-	12	VI4+
VO0-	10	VO0+
VO1-	8	VO1+
DI0	6	DO0
DI1	4	DO1
DGND	2	DO2





Hardware Specifications

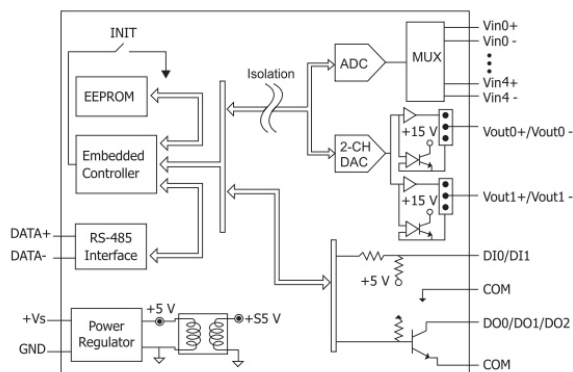


Analog Input		
Channels	5	
Wiring	Differential	
Input Range	Voltage	±150 mVDC, ±500 mVDC, ±1 VDC, ±5 VDC, ±10 VDC
	Current	0 ~ +20 mA, +4 ~ +20 mA, ±20 mA (Jumper Selectable)
Resolution	16 bit	
Accuracy	±0.1% FSR	
Sampling Rate	10 Hz (Total)	
Zero Drift	±20 µV/°C	
Span Drift	±25 ppm/°C	
Common Mode Rejection	86 dB Min.	
Normal Mode Rejection	100 dB	
Input Impedance	Voltage	2 MΩ
	Current	140 Ω
Common Voltage Protection	±200 V	
Overvoltage Protection	240 Vrms	
Overcurrent Protection	Yes, 50 mA @ 110 VDC	
Virtual Channel to Channel Isolation	Yes, 400 VDC	
Individual Channel Configuration	Yes	
Analog Output		
Channels	2	
Output Range	Voltage	+0 ~ +5 VDC, +0 ~ +10 VDC, ±5 VDC, ±10 VDC
	Current	+0 ~ +20 mA, +4 ~ +20 mA (Jumper Selectable)
Resolution	12 bit	
Accuracy	±0.1% FSR	
Voltage Output Capability	10 V @ 20 mA	
Power-on Value	Yes, Programmable	
Safe Value	Yes, Programmable	
Digital Input		
Channels	2	
Input Type	Dry Contact: Source	
Dry Contact Level	Off Voltage Level: Open	On Voltage Level: Close to GND
Photo-Isolation	3750 VDC	
Digital Output		
Channels	3	
Type	Open Collector	
Sink/Source (NPN/PNP)	Sink(NPN)	
Output Voltage	+3.5 VDC ~ +50 VDC	
Output Current	700mA per channel	
Intra-module Isolation, Field to Logic	3750 VDC	
Overvoltage Protection	60 VDC	
Short-circuit Protection	Yes	
Power-on Value	Yes, Programmable	
Safe Value	Yes, Programmable	

Hardware Specifications

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	2500 VDC
Power	
Input Voltage Range	10 ~ 30 VDC
Power Consumption	2.2W
Mechanism	
Installation	DIN-Rail
Dimensions	33mm x106mm x 120mm (W x L x H)
Environment	
Operating Temperature	-25°C ~ +75°C
Storage Temperature	-30°C ~ +80°C
Humidity	10% ~ 90% RH, Non-condensing

Internal I/O Structure



Applications



Ordering Information

WF-2026 CR

5-channel Analog Input, 2-channel Analog Output, 2-channel Digital Input and 3-channel Digital Output Wi-Fi I/O Module (RoHS)