

# Tiny Wi-Fi Analog Input Module



**tWF-AD5**

5-channel Analog Input Module

## Introduction

The tWF-AD5 module have 5 channels differential analog input as WLAN connection complies with the IEEE802.11b/g/n standards. With the popularity of 802.11 network infrastructure, the tWF-AD5 module make an easy way to incorporate wireless connectivity into monitoring and control systems. They also support Modbus TCP protocol and the network encryption configuration, which makes perfect integration to SCADA software or HMI Modbus APP and offer easy and safe access for users from anytime and anywhere.

## System Specifications

Communication	
Interface	Wi-Fi 2.4G
Standard	IEEE 802.11 b/g/n
Encryption	WEP, WPA/WPA2-PSK
Mode	Access Point (AP) & Station (STA)
IP Configuration	DHCP Server (AP, 1 client), DHCP Client, Static IP (STA)
Service	TCP, HTTP, Modbus TCP
LED Indicators	
Power	One 2 colors LED, Blue for System status, Red for Connective status/Locator
Isolation	
Intra-module Isolation, Field-to-Logic	2500 Vdc
EMS Protection	
ESD (IEC 61000-4-2)	±2 kV Contact for Each Terminal ±3 kV Air for Random Point
EFT (IEC 61000-4-4)	±4 kV for Power
Power Requirements	
Reverse Polarity Protection	Yes
Powered from Power Jack	9 ~ 48 Vdc
Consumption	0.84 W Max.
Mechanical	
Dimensions (W x L x H)	52 mm x 97 mm x 27 mm
Installation	DIN-Rail Mounting
Environment	
Operating Temperature	-20 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 95% RH, Non-condensing

## Features

- Wi-Fi communication remote Analog Input module.
- Both Access Point (AP) & Station (STA) mode support
- PC utility, Android APP, Web browser support (HTML)
- MODBUS TCP support
- Wide power supply range
- Wide operating temperature range
- Isolation differential voltage input
- 14/12 bit resolution in Normal/Fast mode
- Cost-effective



## Applications

- Building Automation
- Security Automation
- Machine Automation
- Factory Automation
- Testing Equipment
- Remote Diagnosis
- Remote Maintenance

## Software Utility

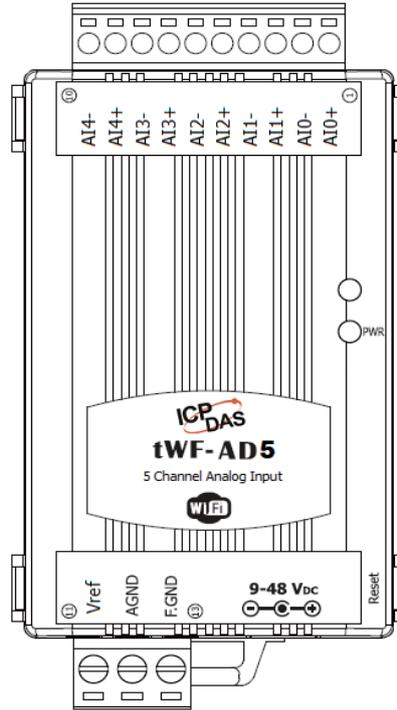
OS	Access Point(AP)	Station(STA)
Windows	Utility	IP Scanner (1) & Utility
Android	APP	IP Scanner (1) & APP
Web Browser	Yes	Yes
Modbus TCP	Yes (2)	Yes (2)

- (1) Free IP Scanner  
(2) PC or Android Freeware

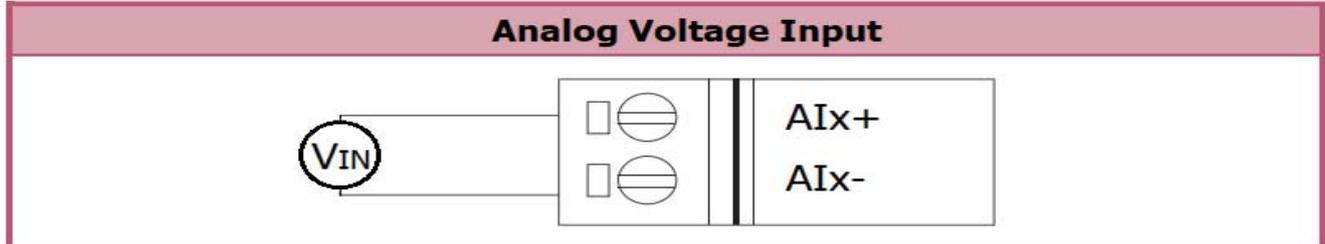
## I/O Specifications

Model	tWF-AD5	
Analog Input		
Input Channels	5 Differential	
Type	±1.25 V, ±2.5 V, ±5 V, ±10 V	
Resolution	Normal Mode	14-bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	14Hz (Max) total
	Fast Mode	180Hz (Max) total
Accuracy	Normal Mode	+/-0.1%
	Fast Mode	+/-0.5%
Zero Drift	+/- 20 µV/°C	
Span Drift	+/- 25 ppm/°C	
Input Impedance	20 MΩ	
Self calibration Reference output	+2.50V ±0.01V	

## Pin Assignments



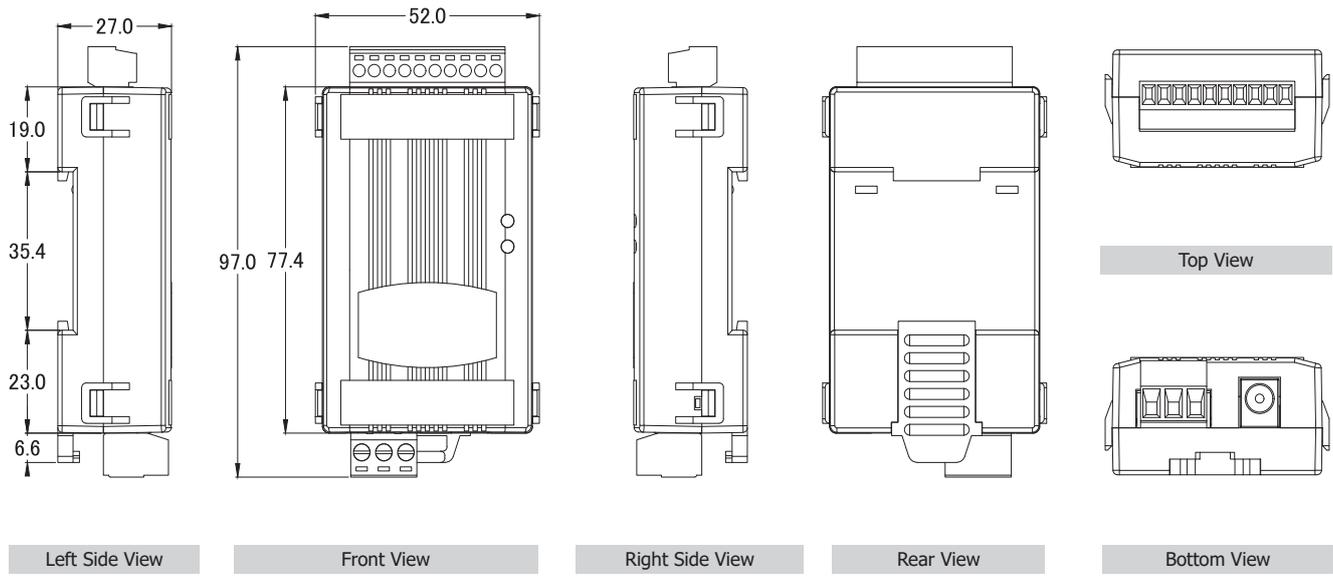
## Wire Connections



## Product Photo



### ■ Dimensions (Units: mm)



### ■ Ordering Information

<b>tWF-AD5 CR</b>	5-channels Analog Input Module (RoHS)
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