



tET-AD2 **tPET-AD2**

Tiny Ethernet Module with Isolated 2-ch AI

Features

- Web Server for Configuration
- Support Modbus TCP/UDP, MQTT, and SNMP V2c Protocols
- I/O Pair Connection (Push and Pull)
- Supports Dual-watchdog
- Supports Firmware Update via Ethernet
- Built-in I/O
  - 2-channel Single-ended Inputs
  - Voltage Inputs and Current Inputs
- Adjustable Sampling Rate (Fast/Normal Mode)

Introduction

The tET-AD2 / tPET-AD2 is an analog input module that includes 2 single-ended analog input channels and provides a programmable input range on all analog inputs (0 ~ 500 mV, 0 ~ 1 V, 0 ~ 2.5 V, 0 ~ 5 V, 0 ~ 10 V, 0 ~ 20 mA, 4 ~ 20 mA). It provides high overvoltage protection of 120 VDC. The sampling rate of the tET-AD2 / tPET-AD2 is adjustable and is available in either fast or normal mode. It also provides 4 kV ESD protection as well as 3000 VDC intra-module isolation.

System Specifications

Model	tET-AD2	tPET-AD2
Software		
Built-in Web Server	Yes	
CPU Module		
CPU	32-bit MCU	
Watchdog Timer	Module, Communication (Programmable)	
Isolation		
2-way Isolation	Ethernet:1500 VDC I/O: 3000 VDC	I/O: 3000 VDC
EMS Protection		
EFT (IEC 61000-4-4)	±4 kV for Power Line	
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal, ±8 kV Air for Random Point	
LED Indicators		
Status	Run, Ethernet	Run, Ethernet, PoE
Ethernet		
Ports	1 x RJ-45, 10/100 Base-TX	
PoE	-	Yes
Access Control	Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP, MQTT, SNMP V2c	
Power		
Reverse Polarity Protection	Yes	
Consumption	1.0 W	1.2 W
Powered from PoE	-	IEEE 802.3af, Class 1
Powered from Terminal Block	+12 ~ +48 VDC	
Mechanical		
Dimensions (mm)	52 x 95 x 27 (W x L x H)	
Installation	DIN-Rail Mounting	
Environment		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

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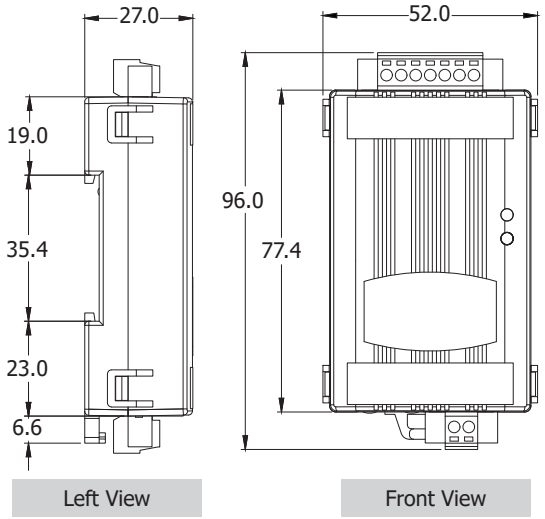
I/O Specifications

Model		tET-AD2	tPET-AD2
Analog Input			
Channels		2 Single-ended	
Range	Voltage	0 ~ 500 mV, 0 ~ 1 V, 0 ~ 2.5 V, 0 ~ 5 V, 0 ~ 10 V	
	Current	0 ~ 20 mA , 4 ~ 20 mA	
Resolution		16-bit	
Accuracy	Normal Mode	±0.1% of FSR	
	Fast Mode	±0.5% of FSR	
Sampling Rate	Normal Mode	10 Hz (total channels)	
	Fast Mode	200 Hz (total channels)	
Input Impedance	Voltage	6 MΩ	
	Current	124 Ω	
Overvoltage Protection		120 VDC	
Overcurrent Protection		50 mA at 110 VDC	
Individual Channel Configuration		Yes	
Open Wire Detection		For 4 ~ 20 mA only	

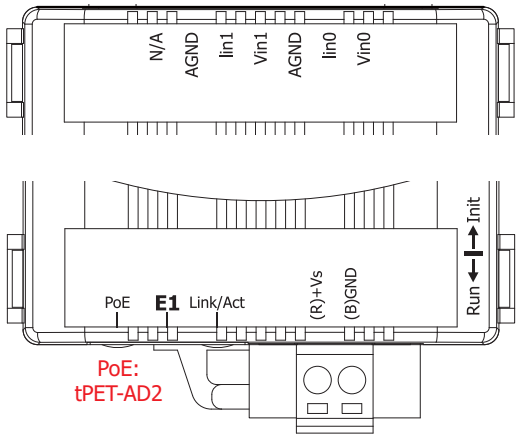
Applications

- Industrial Automation
- Industrial Machinery
- Building Automation
- Food and Beverage Systems
- Semiconductor fabrication
- Control Systems

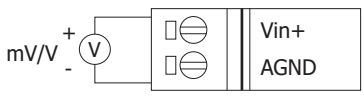
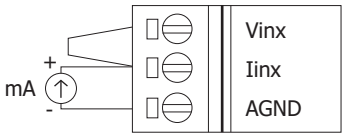
Dimensions (Units: mm)



Pin Assignments



Wire Connections

Voltage Input (Single-ended Mode)	Current Input (Single-ended Mode)
	

Ordering Information

tET-AD2 CR	Tiny Ethernet Module with Isolated 2-ch AI (RoHS)
tPET-AD2 CR	Tiny PoE Ethernet Module with Isolated 2-ch AI (RoHS)

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