



**ET-2217**

**PET-2217**

(PoE) Ethernet I/O Module with 8/16-ch Analog Inputs

## Features

- Built-in Web Server
- Support Modbus TCP/UDP, MQTT, and SNMP V2c Protocols
- 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
- Dual Watchdog
- I/O Pair Connection (Push and Pull)
- Built-in I/O
- 8 Differential or 16 Single-ended Analog Inputs



## Introduction

The ET-2217/PET-2217 is a module with 8-channel differential or 16 single-ended analog input module. The module provides a programmable input range on all Analog Input channels ( $\pm 150$  mV,  $\pm 500$  mV,  $\pm 1$  V,  $\pm 2.5$  V,  $\pm 5$  V,  $\pm 10$  V, 0 to 20mA, 4 to 20mA, and  $\pm 20$  mA). Each analog input channel can be configured for an individual input range, providing a high overvoltage protection of 120 VDC and 50mA overcurrent protection at 110 VDC/VAC. Voltage and current input is DIP switch selectable. The sampling rate of the ET-2217/PET-2217 is adjustable and can be set to either fast (200Hz) or normal (20Hz) mode. It can be used to record voltage and current information. The module also features per-channel open wire detection for 4 ~ 20 mA input and provides 4 kV ESD/EFT protection, 2 kV Surge protection, and 3000 VDC intra-module isolation.

## System Specifications

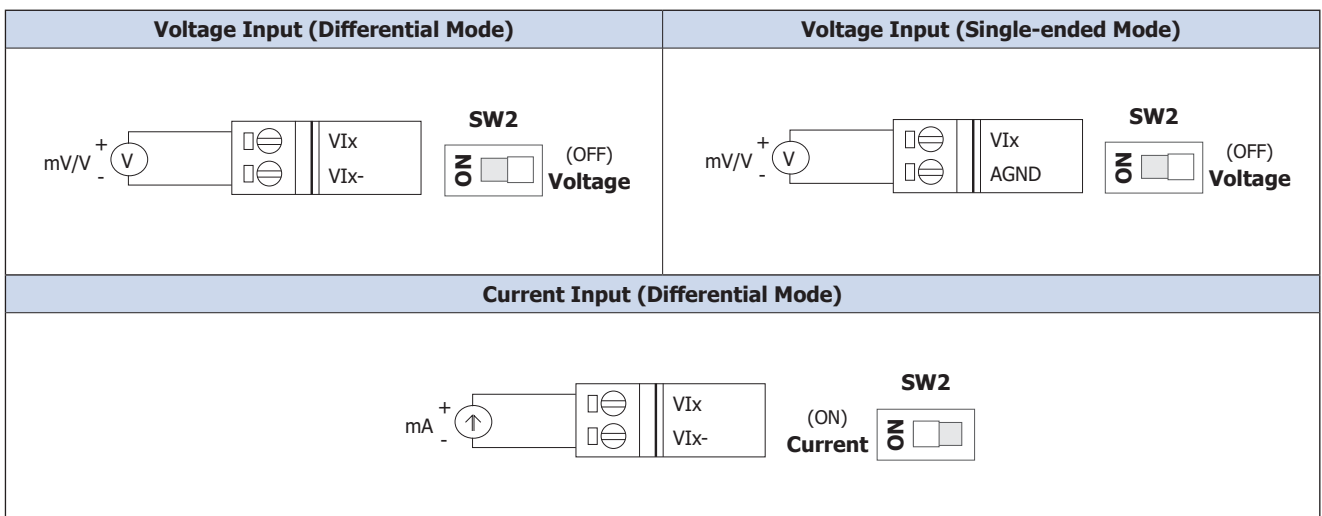
Model	ET-2217	PET-2217
<b>Software</b>		
Built-in Web Server	Yes	
<b>CPU Module</b>		
CPU	32-bit ARM	
Watchdog Timer	Module, Communication (Programmable)	
<b>Isolation</b>		
2-way Isolation	Ethernet: 1500 VDC, I/O: 3000 VDC	I/O: 3000 VDC
<b>EMS Protection</b>		
EFT (IEC 61000-4-4)	$\pm 4$ kV for Power Line	
ESD (IEC 61000-4-2)	$\pm 4$ kV Contact for Each Terminal $\pm 8$ kV Air for Random Point	
Surge (IEC 61000-4-5)	$\pm 2$ kV for Power Line	
<b>LED Indicators</b>		
Status	Run, Ethernet	Run, Ethernet, PoE
<b>Ethernet</b>		
Ports	2 x RJ-45, 10/100 Base-Tx, Switch Ports	
PoE	-	Yes
LAN bypass	Yes	
Security	Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP, MQTT, and SNMP V2c	
<b>Power</b>		
Reverse Polarity Protection	Yes	
Consumption	3.3 W (max.)	3.5 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1
Powered from Terminal Block	+10 to +48 VDC	
<b>Mechanical</b>		
Casing	Metal	
Dimensions (mm)	33 x 127 x 117 (W x L x H)	
Installation	DIN-Rail mounting / Wall mounting (Optional ASO-0015)	
<b>Environment</b>		
Operating Temperature	-25 to +75°C	
Storage Temperature	-40 to +80°C	
Humidity	10 to 90% RH, Non-condensing	

## I/O Specifications

Model	ET-2217		PET-2217	
<b>Analog Input</b>				
Channels	8 Differential or 16 Single-ended			
Type	Voltage, Current (DIP switch selectable - see <a href="#">Note 1</a> )			
Range	Voltage	±150 mV, ±500 mV, ±1 V, ±2.5 V, ±5 V, ±10 V		
	Current	±20 mA, 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	20 Hz (total channels)		
	Fast Mode	200 Hz (total channels)		
Input Impedance	Voltage	2 MΩ (Differential), 1 MΩ (Single-ended)		
	Current	137 Ω (Differential)		
Common Voltage Protection	±200 VDC			
Overvoltage Protection	120 VDC			
Individual Channel Configuration	Yes			
Open Wire Detection	For 4 to 20 mA only			

**Note 1:** Differential wiring can be used for both voltage input and current input. Single-ended wiring can only be used for voltage input.

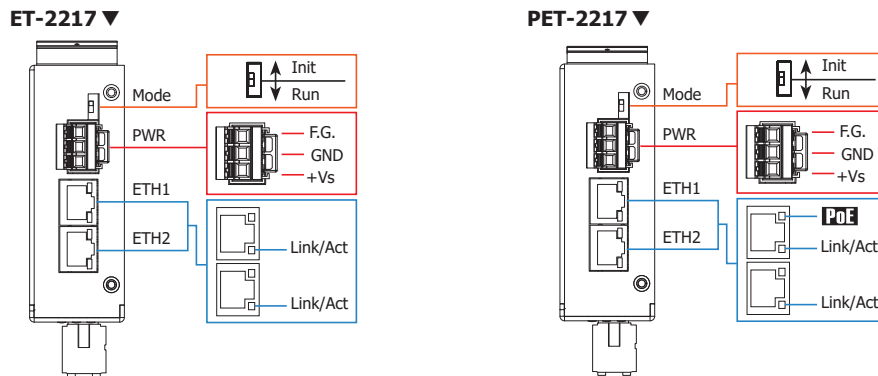
## Wire Connections



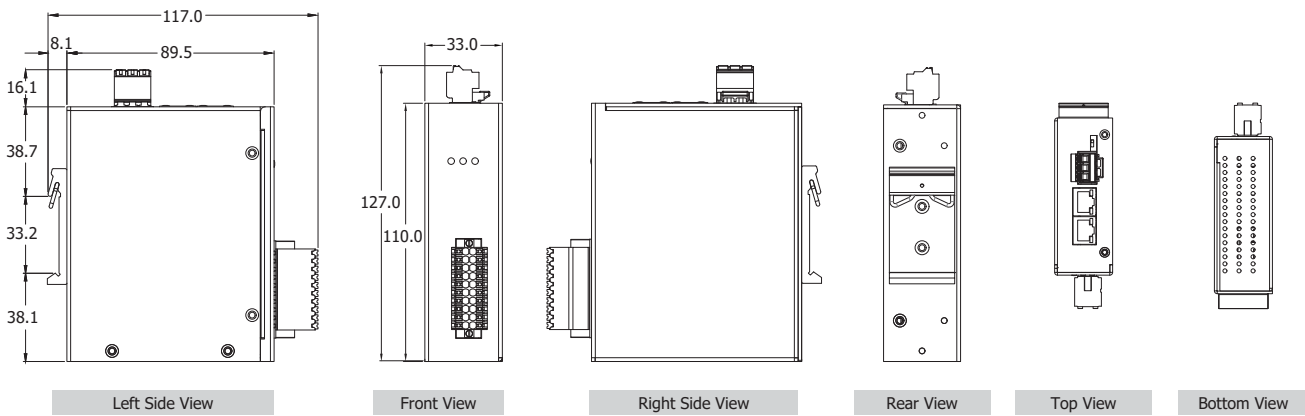
## Pin Assignments

Port	Pin Assignment	Pin Assignment	SW2	Pin Assignment	Pin Assignment	Terminal No.	Pin Assignment
SW1	Init Run	I0		V0	VI0	01	02 VI0-/VI8
PWR	F.G.	I1		V1	VI1	03	04 VI1-/VI9
	GND	I2		V2	VI2	05	06 VI2-/VI10
	+ Vs	I3		V3	VI3	07	08 VI3-/VI11
ETH1		I4		V4	VI4	09	10 VI4-/VI12
ETH2		I5		V5	VI5	11	12 VI5-/VI13
		I6		V6	VI6	13	14 VI6-/VI14
		I7		V7	VI7	15	16 VI7-/VI15
				AGND	17	18 AGND	
				AGND	19	20 AGND	
20-pin Connector							

## Appearance



## Dimensions (Units: mm)

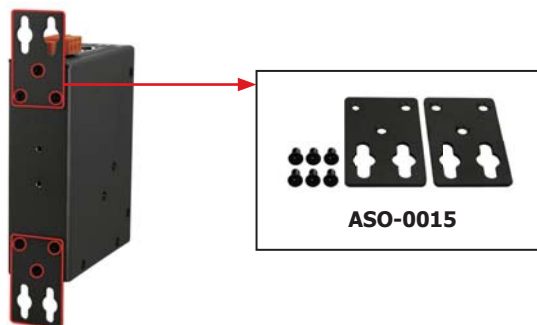


## Ordering Information

<b>ET-2217 CR</b>	Ethernet I/O Module with 2-port Ethernet Switch, 8/16-ch Analog Input (RoHS)
<b>PET-2217 CR</b>	PoE Ethernet I/O Module with 2-port Ethernet Switch, 8/16-ch Analog Input (RoHS)

## Accessories

<b>ASO-0015 CR</b>	Wall Mount Kit (W: 28 mm) (RoHS)
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**(P)ET-2000+ASO-0015**