🅰 Features

- ■ Web Server for Configuration
- ■ Support Modbus TCP/UDP, MQTT, and SNMP V2c Protocols
- ■ 2-port Ethernet Switch (LAN Bypass) for Daisy-chain Wiring
- ■ Supports Dual-watchdog
- ■ I/O Pair Connection (Push and Pull)
- ■ Built-in I/O
  - ☐ 8 Differential or 16 Single-ended AI

ET-2217   PET-2217

Ethernet I/O Module with 8/16-ch AI

📖 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 (±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V, 0 to 20mA, 4 to 20mA, and ±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 provides 4 kV ESD/EFT protection, 2 kV Surge protection, and 3000 VDC intra-module isolation.

📖 System Specifications

Model	ET-2217	PET-2217
Software		
Built-in Web Server	Yes	
CPU Module		
CPU	32-bit ARM	
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	
Surge (IEC 61000-4-5)	±2 kV for Power Line	
LED Indicators		
Status	Run, Ethernet	Run, Ethernet, PoE
Ethernet		
Ports	2 x RJ-45, 10/100 Base-Tx, Switch Ports	
PoE	-	Yes
LAN bypass	Yes	
Access Control	Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP, MQTT, SNMP V2c	
Power		
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	
Mechanical		
Casing	Metal	
Dimensions (mm)	33 x 127 x 117 (W x L x H)	
Installation	DIN-Rail mounting / Wall mounting (Optional ASO-0015)	
Environment		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-40 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

🗂 I/O Specifications

Model	ET-2217	PET-2217
Analog Input		
Channels	8 Differential or 16 Single-ended	
Type	Voltage, Current (DIP switch selectable - see Note 1)	
Range — Voltage	±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V	
Range — Current	±20 mA, 0 ~ +20 mA, +4 ~ +20 mA	
Resolution	16-bit	
Accuracy	±0.1% of FSR	
Sampling Rate — Normal Mode	20 Hz (total channels)	
Sampling Rate — Fast Mode	200 Hz (total channels)	
Input Impedance — Voltage	2 MΩ (Differential), 1 MΩ (Single-ended)	
Input Impedance — Current	137 Ω (Differential)	
Common Voltage Protection	±200 VDC	
Overvoltage Protection	120 VDC	
Overcurrent Protection	50 mA at 110 VDC (max.)	
Individual Channel Configuration	Yes	

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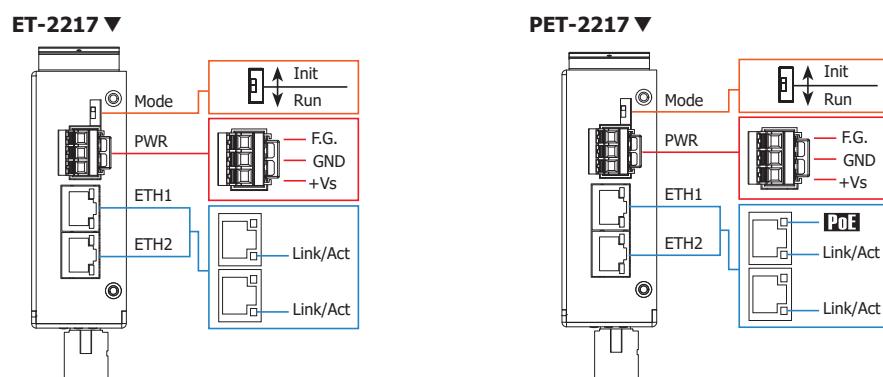
🗂 Wire Connections

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

Current Input (Differential Mode)
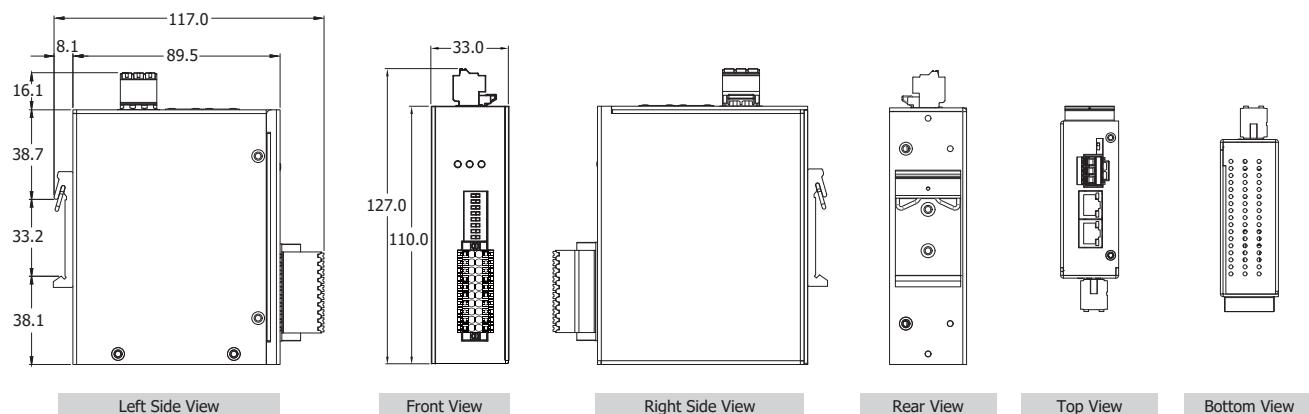
🗂 Pin Assignments

Port	Pin Assignment
SW1	Init / Run
PWR	F.G.
	GND
	+ Vs
ETH1	
ETH2	

Pin Assignment	SW2	Pin Assignment
I0		V0
I1		V1
I2		V2
I3		V3
I4		V4
I5		V5
I6		V6
I7		V7

Pin Assignment	Terminal No.	Pin Assignment
VI0	01	02	VI0-/VI8
VI1	03	04	VI1-/VI9
VI2	05	06	VI2-/VI10
VI3	07	08	VI3-/VI11
VI4	09	10	VI4-/VI12
VI5	11	12	VI5-/VI13
VI6	13	14	VI6-/VI14
VI7	15	16	VI7-/VI15
AGND	17	18	AGND
AGND	19	20	AGND
		20-pin Connector

◼ Appearance

ET-2217 ▼

Mode
PWR
ETH1
ETH2

Init
Run

F.G.
GND
+Vs

Link/Act
Link/Act

PET-2217 ▼

Mode
PWR
ETH1
ETH2

Init
Run

F.G.
GND
+Vs

PoE
Link/Act
Link/Act

◼ Dimensions (Units: mm)

117.0
8.1
89.5
16.1
38.7
33.2
38.1

33.0
127.0
110.0

| Left Side View | Front View | Right Side View | Rear View | Top View | Bottom View |
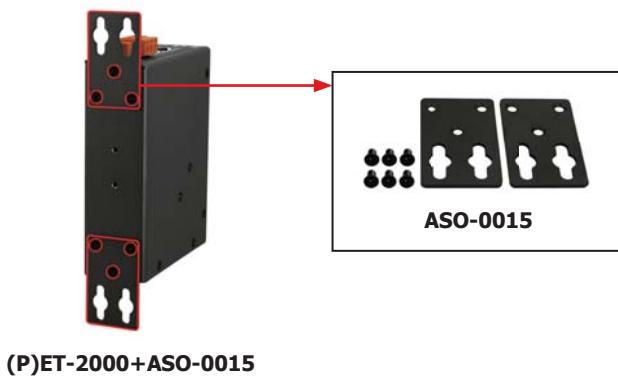
◼ Ordering Information

ET-2217 CR	Ethernet I/O Module with 2-port Ethernet Switch, 8/16-ch AI (RoHS)
PET-2217 CR	PoE I/O Module with 2-port Ethernet Switch, 8/16-ch AI (RoHS)

◼ Accessories

ASO-0015 CR	Wall Mount Kit (W: 28 mm) (RoHS)

ASO-0015

(P)ET-2000+ASO-0015