ET-7017
PET-7017
ET-7217
PET-7217

Ethernet I/O Module with 8-channels AI, 4-channels DO

🅰 Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Security
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C
- I/O Pair Connection
- Built-in I/O
  - ☐ AI: 8 Channels with 240 Vrms Overvoltage Protection
  - ☐ DO: 4 Channels

■ Introduction

The ET-7017/PET-7017/ET-7217/PET-7217 is a module with 8-channel differential analog inputs and 4-channel digital ouputs. It provides programmable input range on all analog channels (+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA, 0 ~ 20 mA and 4 ~ 20 mA) and digital output can be set alarm output with Short-circuit protection and overload protection. Each analog channel is allowed to configure an individual range and has 240 Vrms high overvoltage protection. Each analog input can be programmed to accept voltage or current as input depending upon the position of corresponding jumper. The sampling rate of ET-7017/PET-7017/ET-7217/PET-7217 is changeable; there are fast mode and normal mode for your consideration. ET-7017/PET-7017/ET-7217/PET-7217 also has qualification for 4 kV ESD protection as well as 2500 VDC intra-module isolation.

■ System Specifications

Models	ET-7017	PET-7017	ET-7217	PET-7217
Software				
Built-in Web Server	Yes			
Web HMI	Yes			
I/O Pair Connection	Yes			
Communication				
Ethernet Port	1 x RJ-45, 10/100 Base-TX		2 x RJ-45, 10/100 Base-TX, Swtich Ports	
PoE	-	Yes	-	Yes
Protocol	Modbus TCP, Modbus UDP			
Security	ID, Password and IP Filter			
Dual Watchdog	Yes, Module (0.8 seconds), Communication (Programmable)			
LED Indicators				
for System Running	Yes			
for Ethernet Link/Act	Yes			
for DI/DO status	-		Yes	
for PoE Power	-	Yes	-	Yes
2-Way Isolation				
Ethernet	1500 VDC	-	1500 VDC	-
I/O	2500 VDC			
EMS Protection				
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal and ±8 kV Air for Random Point			
EFT (IEC 61000-4-4)	±4 kV for Power Line Line		±2 kV for Power Line	
Surge (IEC 61000-4-5)	±0.5 kV for Power Line		±2 kV for Power Line	
Power				
Reverse Polarity Protection	Yes			
Powered from Terminal Block	10 ~ 30 VDC	12 ~ 48 VDC	12 ~ 48 VDC	12 ~ 48 VDC
Powered from PoE	-	Yes, IEEE 802.3af, Class1	-	Yes, IEEE 802.3af, Class1
Consumption	2.8 W (Max.)	3.2 W (Max.)	4.2 W (Max.)	4.4 W (Max.)
Mechanical				
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm		120 mm x 76 mm x 38 mm	
Installation	DIN-Rail or Wall Mounting			
Environment				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

■ I/O Specifications

Analog Input		
Channels		8 (Differential)
Type		+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V +/-20 mA, 0 ~ 20 mA, 4 ~ 20 mA (Jumper Selectable)
Individual Channel Configuration		Yes
Resolution		16-bit
Sampling Rate	Normal Mode	10 Samples/Second (Total)
	Fast Mode	50 Samples/Second (Total)
Accuracy	Normal Mode	+/-0.1%
	Fast Mode	+/-0.5% or better
Zero Drift		+/-20 µV/°C
Span Drift		+/-25 ppm/°C
Overvoltage Protection		240 Vrms
Common Voltage Protection		±200 VDC
Overcurrent Protection		Yes, 50 mA at 110 VDC
Virtual Channel to Channel Isolation		Yes, 400 VDC
Open Wire Detection for 4 ~ 20 mA		Yes
Input Impedance	Voltage	2 MΩ
	Current	125 Ω
Common Mode Rejection		86 dB Min.
Normal Mode Rejection		100 dB
Digital Output		
Channels		4
Type		Isolated Open Collector
Sink/Source (NPN/PNP)		Sink
Max. Load Current		700 mA/Channel
Load Voltage		5 VDC ~ 50 VDC
Overvoltage Protection		60 VDC
Overload Protection		1.4 A
Short-circuit Protection		Yes
Power-on Value		Yes, Programmable
Safe Value		Yes, Programmable

■ Pin Assignments

PET-7017: PoE

ET-7017: +10 ~ +30 VDC
PET-7017: +12 ~ +48 VDC

PET-7217: PoE

ET-7217: +12 ~ +48 VDC
PET-7217: +12 ~ +48 VDC

■ Wire Connections

Voltage Input	Current Input

Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)		
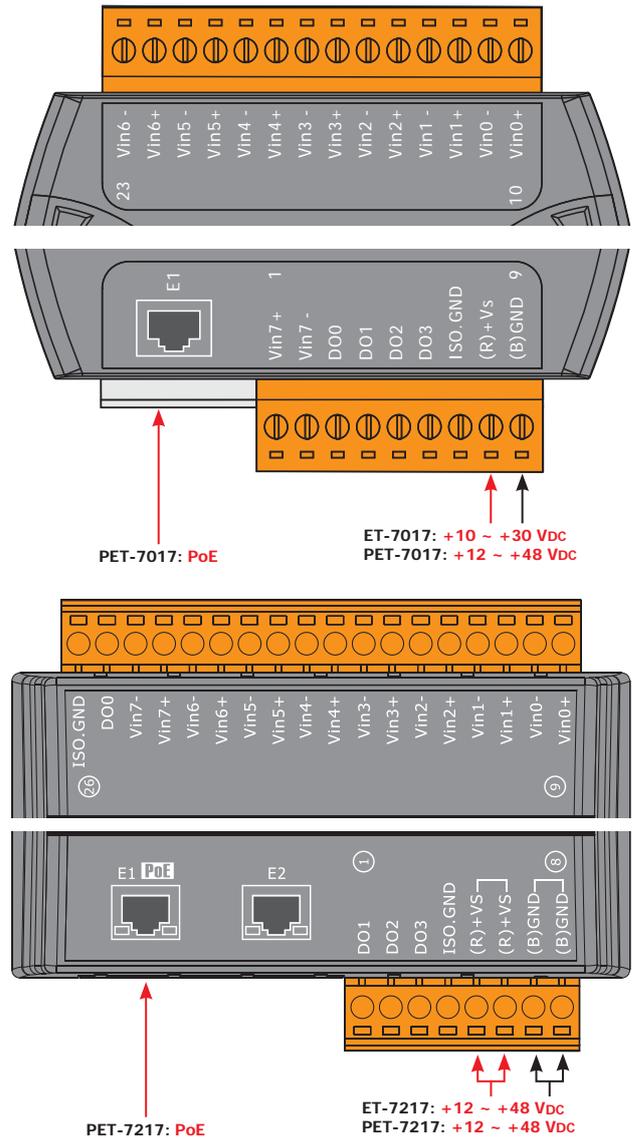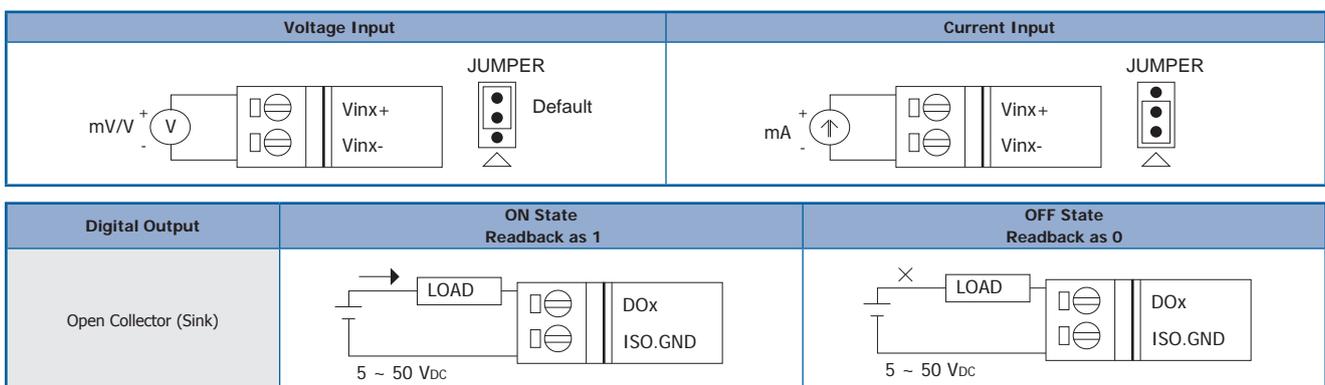
■ Ordering Information

ET-7017 CR	Ethernet I/O Module with 8-channels AI, 4-channels DO (RoHS)
PET-7017 CR	PoE Ethernet I/O Module with 8-channels AI, 4-channels DO (RoHS)
ET-7217 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels AI, 4-channels DO (RoHS)
PET-7217 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels AI, 4-channels DO (RoHS)