



ET-7017
PET-7017

ET-7217
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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 outputs. 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.

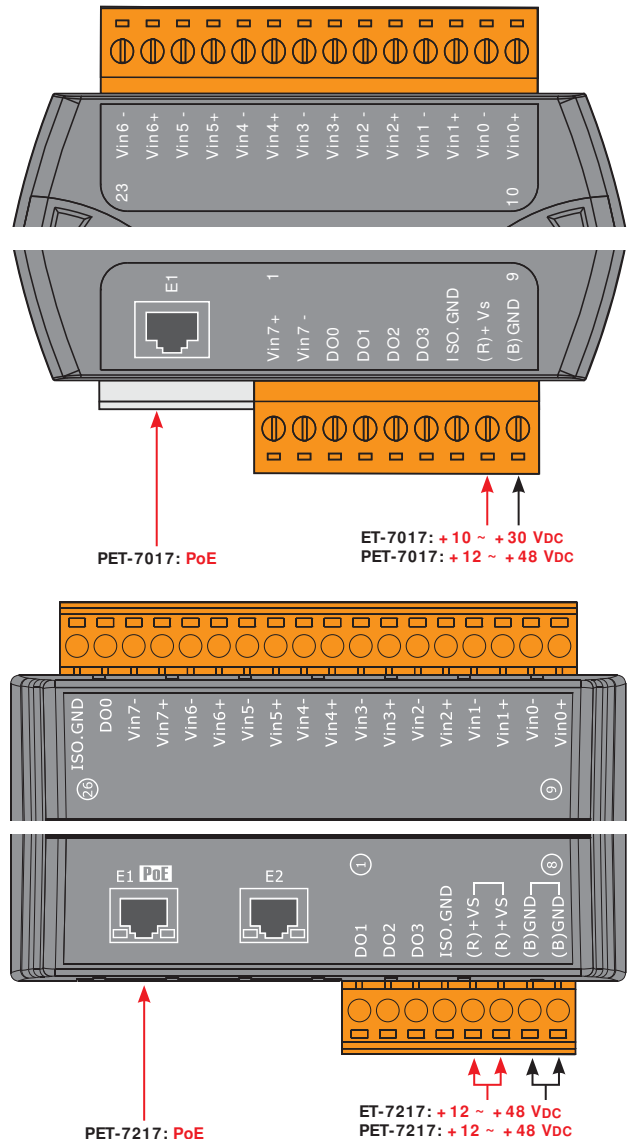
System Specifications

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, Switch 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 μ V/°C
Span Drift		+/-25 ppm/°C
Overvoltage Protection		240 Vrms
Common Voltage Protection		$\pm$ 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 M Ω
	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



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)