



ET-7026
PET-7026

ET-7226
PET-7226

Ethernet I/O Module with 6-channels AI, 2-channels AO,
2-channels DI, 2-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: 6 Channels with 240 Vrms Overvoltage Protection
 - AO: 2 Channels
 - DI/Counter: 2 Channels
 - DO: 2 Channels



Introduction

The ET-7026/PET-7026/ET-7226/PET-7226 is a multi-function module with 6-channel analog inputs, 2-channel analog outputs, 2-channel digital inputs and 2-channel digital outputs. It provides various programmable analog inputs (+/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA, 0 ~ 20 mA and 4 ~ 20 mA), and analog outputs (+/-5 V, +/-10 V, 0 ~ 20 mA and 4 ~ 20 mA). Each analog input is allowed to configure a proper range with 240 Vrms high voltage protection. Each analog input/output can be programmed to accept current or voltage as input/output depending upon the position of corresponding jumper.

System Specifications

Models	ET-7026	PET-7026	ET-7226	PET-7226
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	3.6 W (Max.)	3.9 W (Max.)	5.0 W (Max.)	5.2 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			

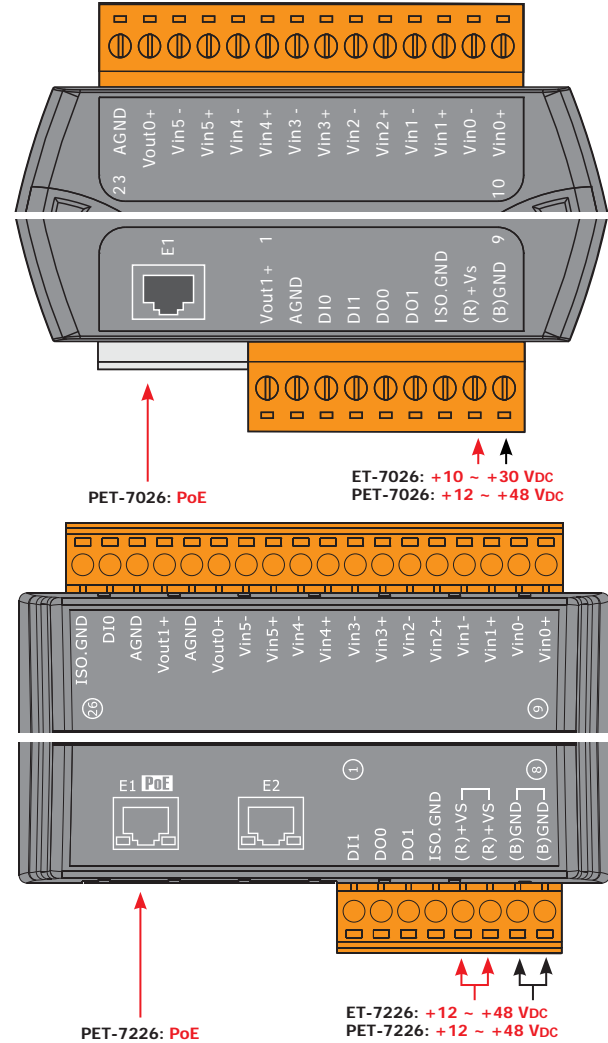
I/O Specifications

Analog Input		
Channels	6 (Differential)	
Type	+/-500 mV, +/-1 V, +/-5 V, +/-10 V +0 mA ~ +20 mA, +/-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	
Overcurrent Protection	50 mA Max. at 110 VDC/VAC Max.	
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	
Analog Output		
Channels	2	
Type	+0 VDC ~ +5 VDC, +/-5 VDC, +0 VDC ~ +10 VDC, +/-10 VDC, +0 mA ~ +20 mA, +4 mA ~ +20 mA (Jumper Selectable)	
Individual Channel Configuration	Yes	
Resolution	12-bit	
Accuracy	+/-0.1% of FSR	
Voltage Output Capability	20 mA @ 10 V	
Current Load Resistance	500 Ω	
Open Wire Detection	Yes, for 4 ~ 20 mA only	
Power-on Value	Yes, Programmable	
Safe Value	Yes, Programmable	
Digital Input/Counter		
Channels	2	
Dry Contact (Source)	On Voltage Level	Close to GND
	Off Voltage Level	Open
	Effective Distance for Dry Contact	500 M Max.
Wet contact (Sink Source)	On Voltage Level	+1 VDC Max.
	Off Voltage Level	+3.5 VDC ~ +30 VDC
Input Impedance	-	
Counters	Channels	2
	Max. Count	4,294,967,295 (32-bit)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Overvoltage Protection	30 Vdc	
Digital Output		
Channels	2	
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	

Ordering Information

ET-7026 CR	Ethernet I/O Module with 6-channels AI, 2-channels AO, 2-channels DI, 2-channels DO (RoHS)
PET-7026 CR	PoE Ethernet I/O Module with 6-channels AI, 2-channels AO, 2-channels DI, 2-channels DO (RoHS)
ET-7226 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 6-channels AI, 2-channels AO, 2-channels DI, 2-channels DO (RoHS)
PET-7226 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 6-channels AI, 2-channels AO, 2-channels DI, 2-channels DO (RoHS)

Pin Assignments



Wire Connections

Voltage Input (Default)		
mV/V		JUMPER
Current Input		
mA		JUMPER
Voltage Output (Default)		
Load		Old Version New Version for PCB V1.20 and later
Current Output		
Load		Old Version New Version for PCB V1.20 and later
Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
Dry Contact		
Wet Contact		
Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)		