



ET-7026
PET-7026

ET-7226
PET-7226

Ethernet I/O Module with 6-channel AI, 2-channel AO,
2-channel DI, 2-channel 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 to +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

Model	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, 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	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 to +75°C			
Storage Temperature	-30 to +80°C			
Humidity	10 to 90% RH, Non-condensing			

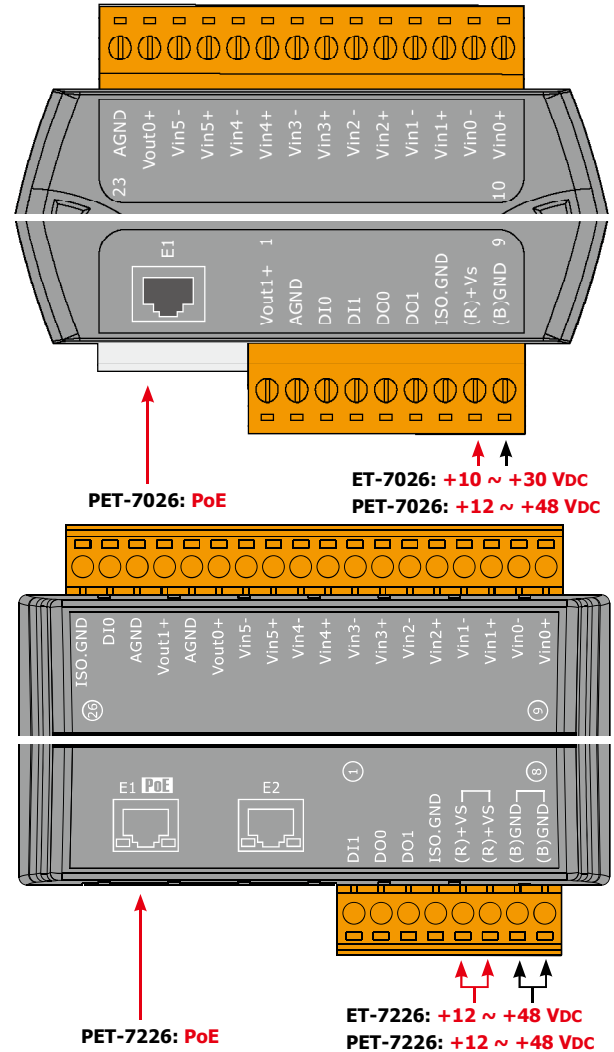
I/O Specifications

Analog Input		
Channels	6 (Differential)	
Type	+/-500 mV, +/-1 V, +/-5 V, +/-10 V +0 mA ~ +20 mA, +/-20 mA, +/-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/ $^{\circ}$ C	
Span Drift	+/-25 ppm/ $^{\circ}$ 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-channel AI, 2-channel AO, 2-channel DI, 2-channel DO (RoHS)
PET-7026 CR	PoE Ethernet I/O Module with 6-channel AI, 2-channel AO, 2-channel DI, 2-channel DO (RoHS)
ET-7226 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 6-channel AI, 2-channel AO, 2-channel DI, 2-channel DO (RoHS)
PET-7226 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 6-channel AI, 2-channel AO, 2-channel DI, 2-channel DO (RoHS)

Pin Assignments



Wire Connections

Voltage Input (Default)		
	Vin+	JUMPER
Current Input		
	Vin+	JUMPER
Voltage Output (Default)		
	Voutx+	AGND
	Old Version	New Version for PCB V1.20 and later
Current Output		
	Voutx+	AGND
	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)		