



ET-7026
PET-7026
ET-7226
PET-7226

Ethernet I/O Module with 6-ch AI, 2-ch AO, 2-ch DI, 2-ch DO

Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Access Control
- 2-port Ethernet Switch (LAN bypass) for Daisy-chain Wiring
- Dual Watchdog
- 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 the corresponding jumper.

System Specifications

Model	ET-7026	PET-7026	ET-7226	PET-7226
Software				
Built-in Web Server	Yes			
CPU Module				
Watchdog Timer	Module, Communication (Programmable)			
2-Way Isolation				
Ethernet	1500 VDC	-	1500 VDC	-
I/O	2500 VDC			
EMS Protection				
EFT (IEC 61000-4-4)	±4 kV for Power Line		±2 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)	±0.5 kV for Power Line		±2 kV for Power Line	
LED Indicators				
Status	Run, Ethernet	Run, Ethernet, PoE	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE
Ethernet				
Ports	1 x RJ-45, 10/100 Base-TX		2 x RJ-45, 10/100 Base-TX, Swtich Ports	
PoE	-	Yes	-	Yes
LAN bypass	-		Yes	
Access Control	ID, Password and IP Filter			
Protocol	Modbus TCP, Modbus UDP			
Power				
Reverse Polarity Protection	Yes			
Consumption	3.6 W (max.)	3.9 W (max.)	5.0 W (max.)	5.2 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1	-	IEEE 802.3af, Class1
Powered from Terminal Block	+10 ~ +30 VDC	+12 ~ +48 VDC		
Mechanical				
Dimensions (mm)	72 x 123 x 35 (W x L x H)		76 x 120 x 42 (W x L x H)	
Installation	DIN-Rail Mounting			
Environment				
Operating Temperature	-25 ~ +75 °C			
Storage Temperature	-30 ~ +80 °C			
Humidity	10 ~ 90% RH, Non-condensing			

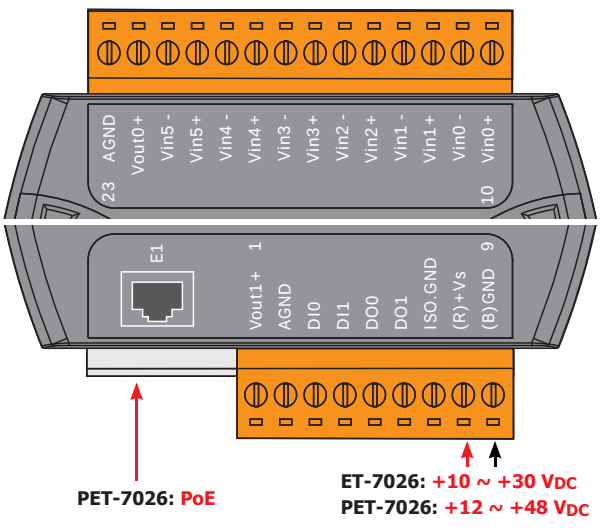
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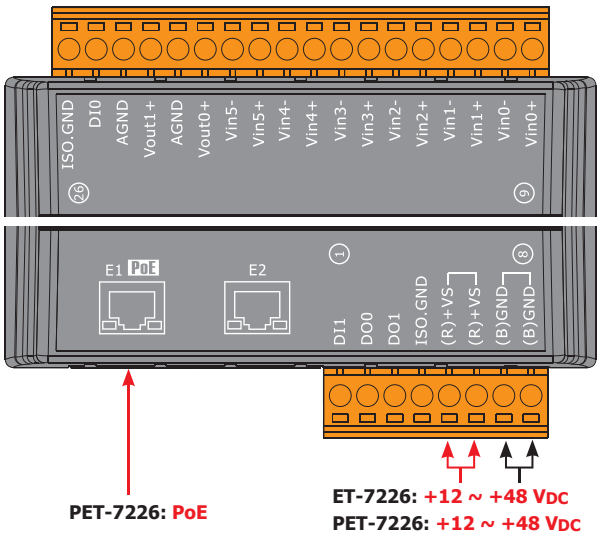
I/O Specifications

Analog Input		
Channels		6 (Differential)
Type		Voltage, Current
Range		±500 mV, ±1 V, ±5 V, ±10 V 0 ~ 20 mA, ±20 mA, 4 ~ 20 mA (Jumper Selectable)
Resolution		16-bit
Accuracy	Normal Mode	±0.1%
	Fast Mode	±0.5% or better
Sampling Rate	Normal Mode	10 Hz (total channels)
	Fast Mode	50 Hz (total channels)
Input Impedance	Voltage	2 MΩ
	Current	125 Ω
Common Voltage Protection		±200 VDC
Overvoltage Protection		240 Vrms
Overcurrent Protection		50 mA at 110 VDC (max.)
Individual Channel Configuration		Yes
Open Wire Detection		For 4 ~ 20 mA only
Virtual Channel to Channel Isolation		±400 VDC
Analog Output		
Channels		2
Type		Voltage, Current
Range		+0 ~ +5 VDC, ±5 VDC, +0 ~ +10 VDC, ±10 VDC, 0 ~ 20 mA, 4 ~ 20 mA (Jumper Selectable)
Resolution		12-bit
Accuracy		±0.1% of FSR
Open Wire Detection		For 4 ~ 20 mA only
Voltage Output Capability		10 V @ 20 mA
Current Load Resistance		500 Ω
Individual Channel Configuration		Yes
Power on Value		Programmable
Safe Value		Programmable
Digital Input/Counter		
Channels		2
Type		Dry Contact, Wet Contact
ON Voltage Level	Dry	Close to GND
	Wet	+1 VDC (max.)
OFF Voltage Level	Dry	Open
	Wet	+3.5 ~ +30 VDC
Max. Counts		4,294,967,295 (32-bit)
Frequency		100 Hz
Min. Pulse Width		5 ms
Effective Distance		500 m (max.)
Overvoltage Protection		+30 VDC
Digital Output		
Channels		2
Type		Isolated Open Collector
Sink/Source (NPN/PNP)		Sink
Load Voltage		+5 ~ +50 VDC
Load Current		700 mA/channel
Overvoltage Protection		+60 VDC
Overload Protection		1.4 A
Short-circuit Protection		Yes
Power on Value		Programmable
Safe Value		Programmable

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Pin Assignments

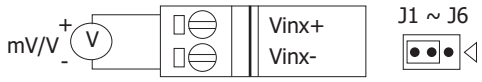




Wire Connections

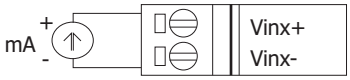
Analog Input

Voltage Input (Default)



J1 ~ J6

Current Input

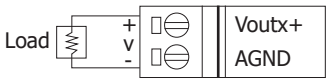


J1 ~ J6



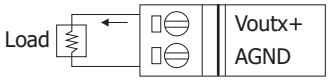
Analog Output

Voltage Output (Default)

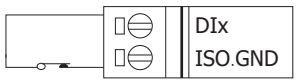
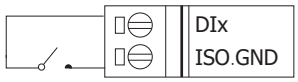
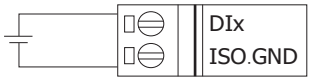
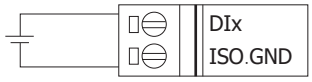


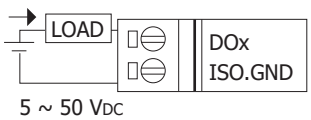
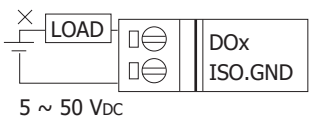
Old Version	PCB V1.20 and later
	J7 ~ J8 

Current Output



Old Version	PCB V1.20 and later
	J7 ~ J8 

Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
Dry Contact		
Wet Contact	 +1 VDC max.	 +3.5 ~ +30 VDC

Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)	 5 ~ 50 VDC	 5 ~ 50 VDC

Ordering Information

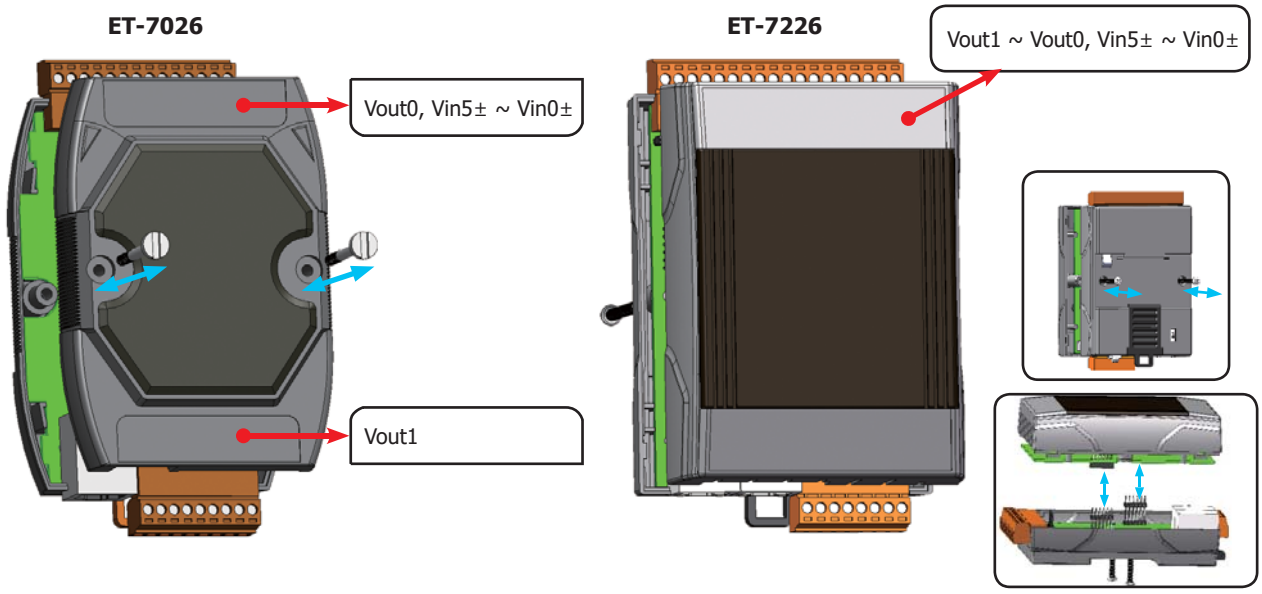
ET-7026 CR	Ethernet I/O Module with 6-ch AI, 2-ch AO, 2-ch DI, 2-ch DO (RoHS)
PET-7026 CR	PoE I/O Module with 6-ch AI, 2-ch AO, 2-ch DI, 2-ch DO (RoHS)
ET-7226 CR	Ethernet I/O Module with 2-port Ethernet Switch, 6-ch AI, 2-ch AO, 2-ch DI, 2-ch DO (RoHS)
PET-7226 CR	PoE I/O Module with 2-port Ethernet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

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Jumper

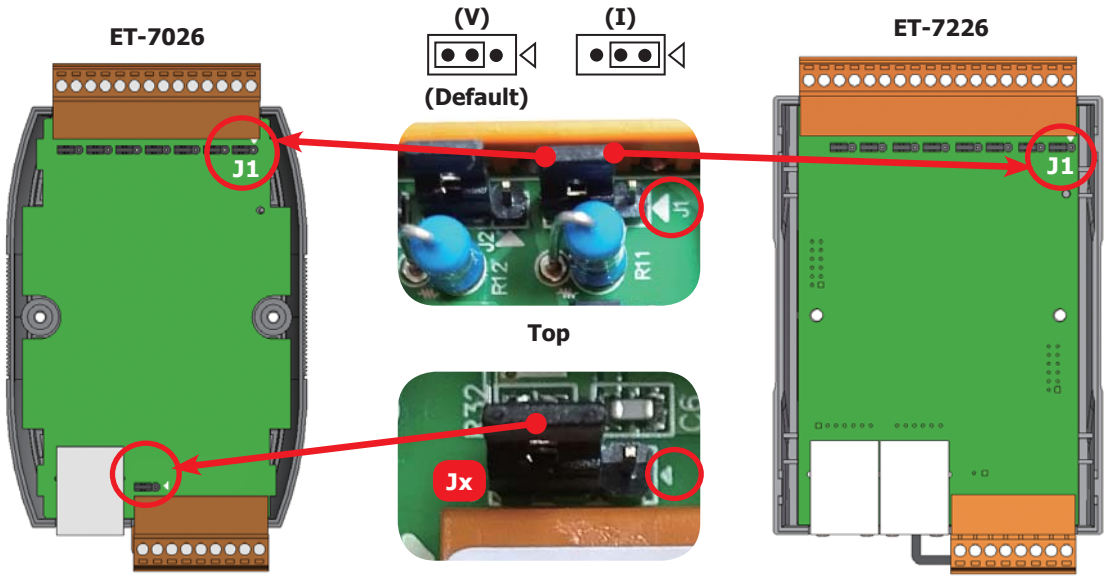
Notice:

1. Before adjusting the jumpers, remove the module's top cover. For the ET-7200 series, the screws are located on the rear cover, and the CPU board must be removed as well.



2. Users can locate the Jx/JPx jumpers on the board by checking the I/O labels on the cover.

Model	ET-7226							
	-	ET-7026						
Channel (Top)	Vout1	Vout0	Vin5±	Vin4±	Vin3±	Vin2±	Vin1±	Vin0±
Jumper	J8	J7	J6	J5	J4	J3	J2	J1



Channel (Bottom)	Vout1
Jumper	J8

3. After adjusting the jumpers, reinstall the top cover (along with the CPU board) and secure the screws.

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