



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.

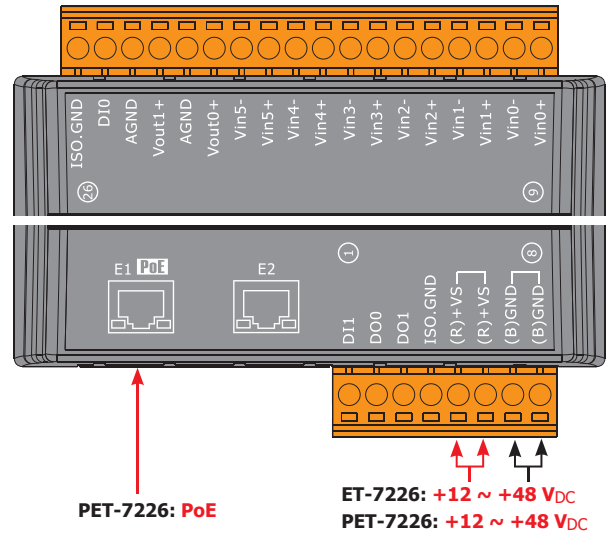
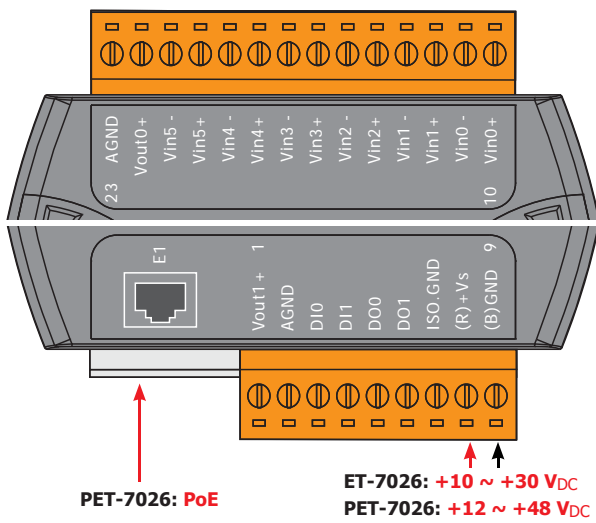
System Specifications

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, Switch 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			

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	

Pin Assignments



Wire Connections

Analog Input	
Voltage Input (Default)	
	J1 ~ J6
Current Input	
	J1 ~ J6

Analog Output					
Voltage Output (Default)					
	<table border="1"> <tr> <td>Old Version</td> <td>PCB V1.20 and later</td> </tr> <tr> <td></td> <td>J7 ~ J8</td> </tr> </table>	Old Version	PCB V1.20 and later		J7 ~ J8
Old Version	PCB V1.20 and later				
	J7 ~ J8				
Current Output					
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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		

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

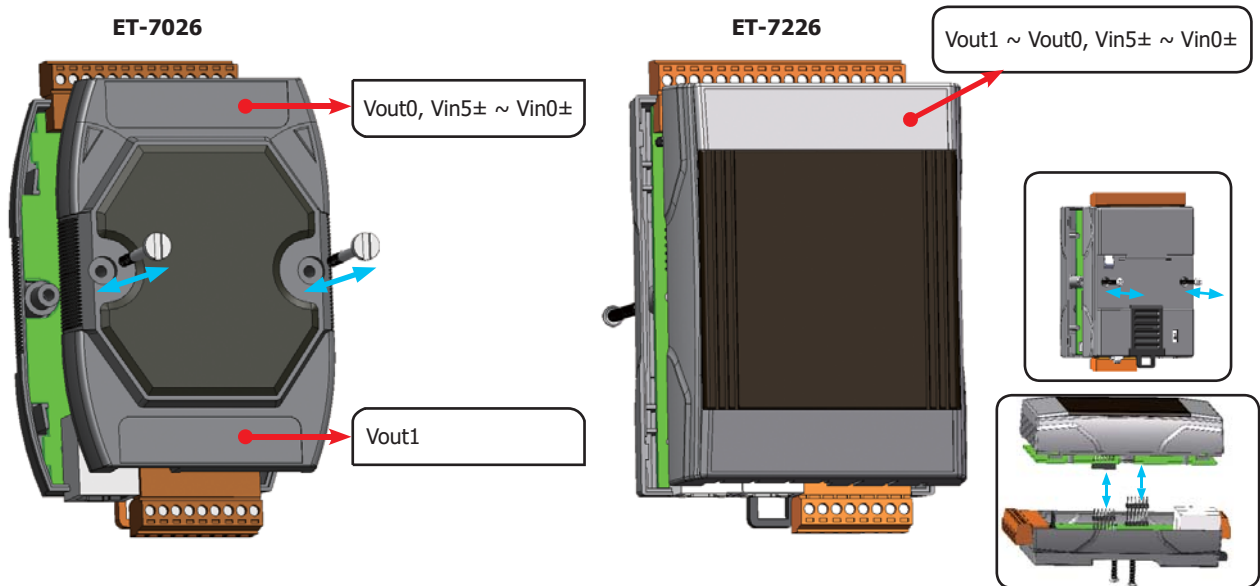
Ordering Information

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)

Jumper

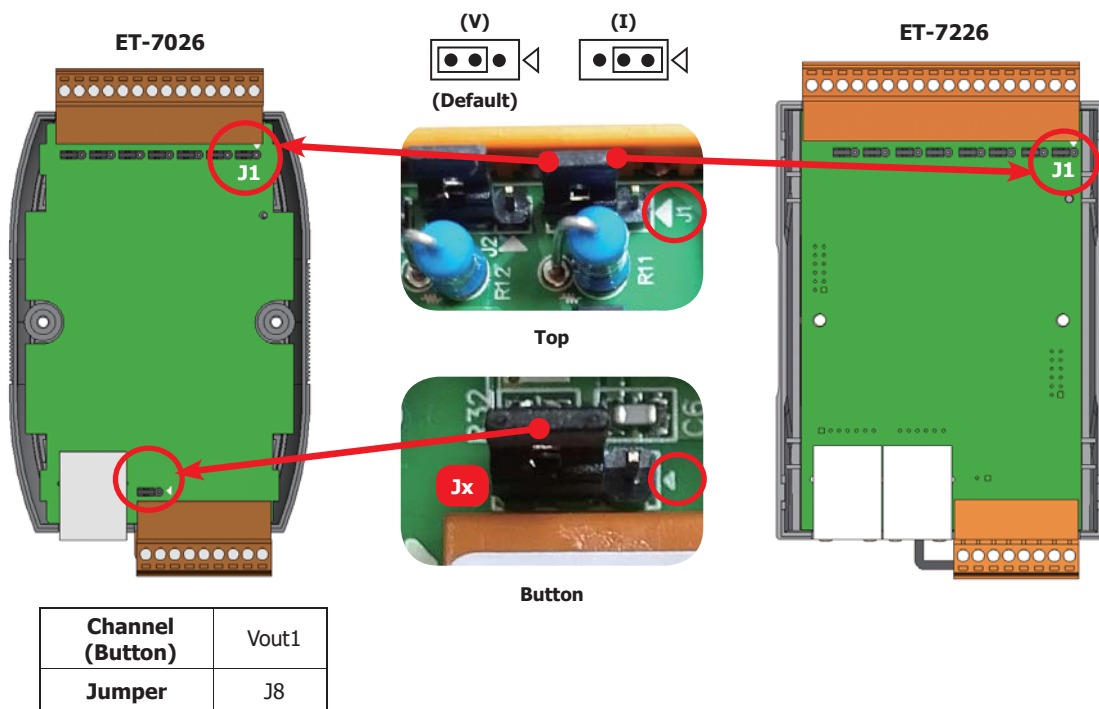
Notice:

- 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.



- 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



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