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

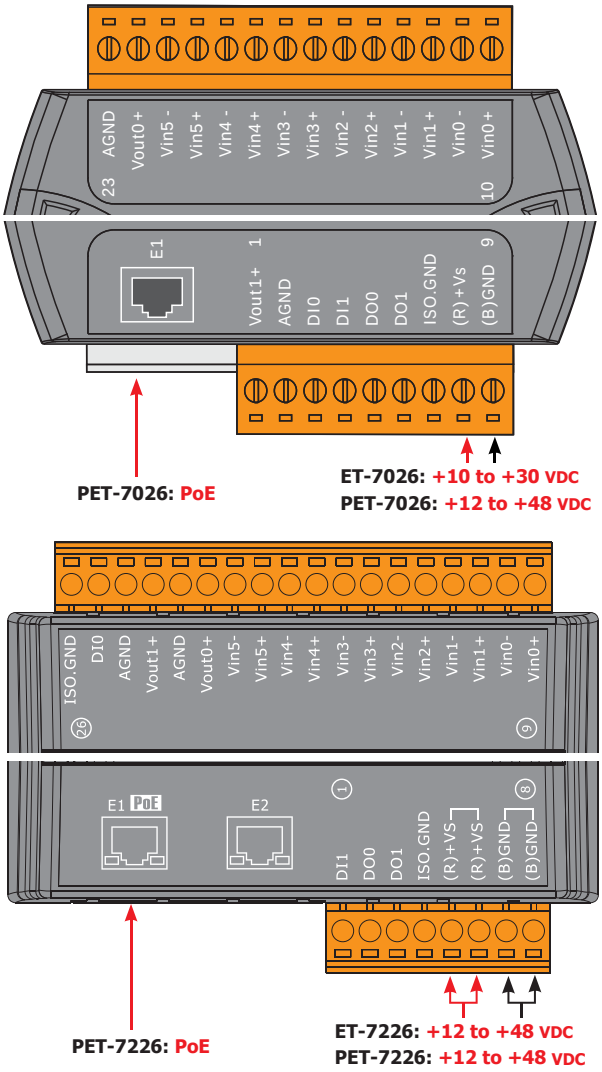
Model	ET-7026	PET-7026	ET-7226	PET-7226
Software				
Built-in Web Server	Yes			
CPU Module				
Watchdog Timer	Module, Communication (Programmable)			
2-Way Isolation				
Ethernet	1500 VDC	-	1500 VDC	-
I/O	2500 VDC			
EMS Protection				
EFT (IEC 61000-4-4)	±4 kV for Power Line		±2 kV for Power Line	
ESD (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 to +30 VDC	+12 to +48 VDC		
Mechanical				
Dimensions (mm)	72 x 123 x 35 (W x L x H)		76 x 120 x 38 (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			

Analog Input	
Channels	6 (Differential)
Type	Voltage, Current
Range	±500 mV, ±1 V, ±5 V, ±10 V 0 to 20 mA, ±20 mA, 4 to 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 to 20 mA only
Virtual Channel to Channel Isolation	±400 VDC
Analog Output	
Channels	2
Type	Voltage, Current
Range	+0 to +5 VDC, ±5 VDC, +0 to +10 VDC, ±10 VDC, 0 to 20 mA, 4 to 20 mA (Jumper Selectable)
Resolution	12-bit
Accuracy	±0.1% of FSR

I/O Specifications

Analog Output		
Open Wire Detection		For 4 to 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 to +30 VDC
Max. Counts		4,294,967,295 (32-bit)
Frequency		100 Hz
Min. Pulse Width		5 ms
Effective Distance		500m (max.)
Overvoltage Protection		+30 VDC
Digital Output		
Channels		2
Type		Isolated Open Collector
Sink/Source (NPN/PNP)		Sink
Load Voltage		+5 to +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

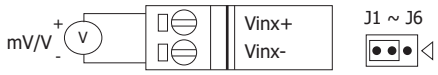
Pin Assignments



Wire Connections

Analog Input

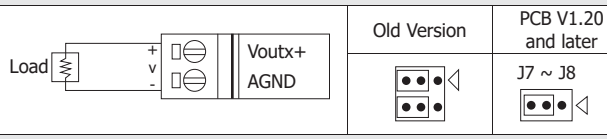
Voltage Input (Default)



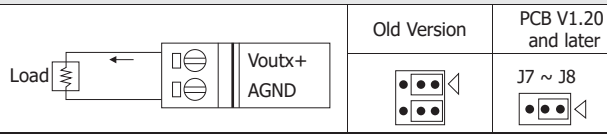
Current Input

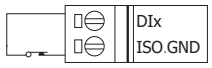
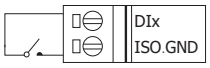
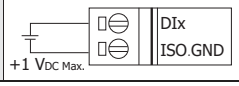
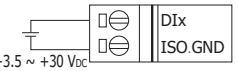
Analog Output

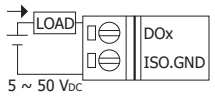
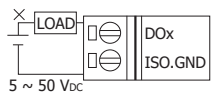
Voltage Output (Default)



Current Output



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)		

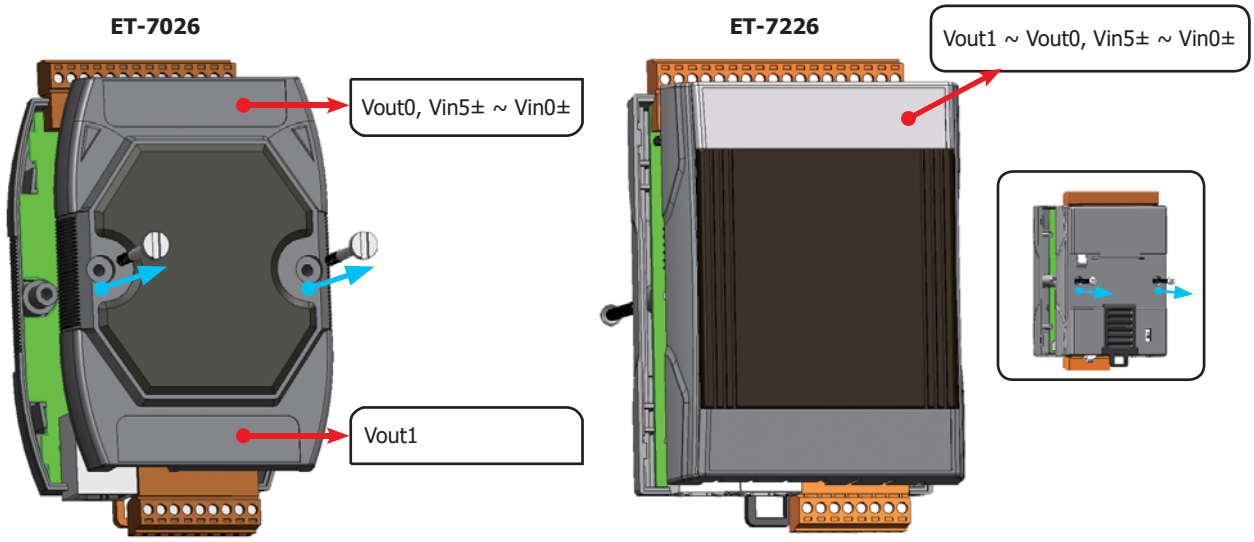
Ordering Information

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

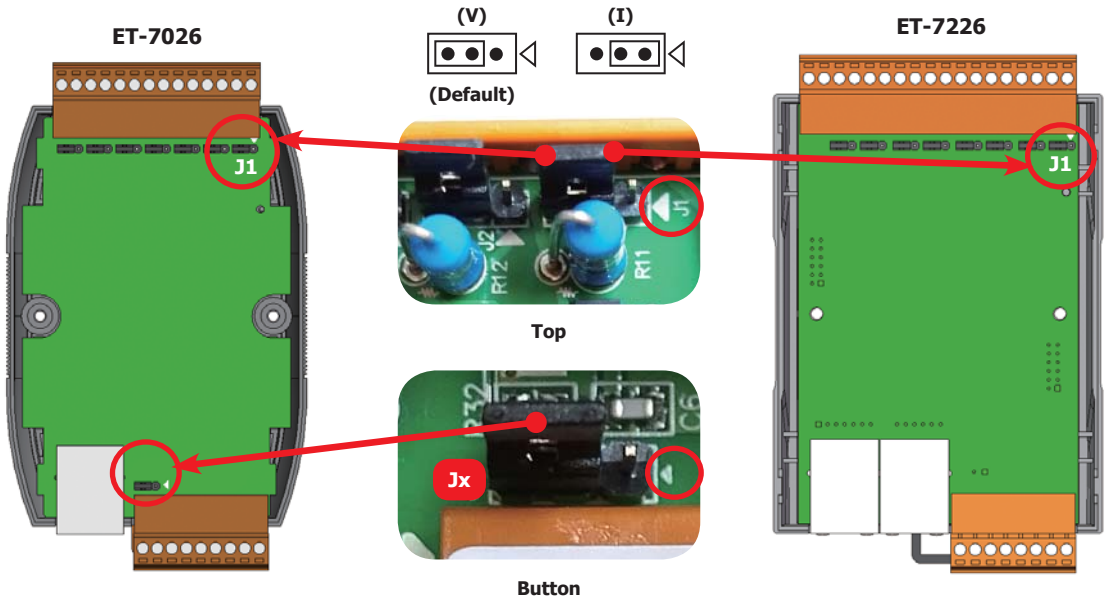
Notice:

1. Remove the top cover of the module before adjusting the jumper. Additionally, the screws for the ET-7200 are located on the back cover.



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 (Button)	Vout1
Jumper	J8