



Ethernet I/O Modules



Multifunction Module

Features

- PoE and Regular Ethernet Options
- Built-In Web Server
- Web HMI
- Modbus/TCP, Modbus/UDP Protocol
- Communication Security
- Dual Watchdog
- Operating Temperature: -25 ~ +75 °C
- I/O Pair Connection
- Built-In I/O
 - AI: 6 Channels
 - AO: 2 Channels
 - DI/Counter: 2 Channels
 - DO: 2 Channels



Introduction

The ET-7000/PET-7000, a web-based Ethernet I/O module, features a built-in web server which allows configuration, I/O monitoring and I/O control by simply using a regular web browser. Remote control is as easy as surfing the Internet.

Besides, with the web HMI function, no more programming or HTML skills are required; creating dynamic and attractive web pages for I/O monitoring and I/O control would be fun to engineers ever after. The ET-7000/PET-7000 offers easy and safe access for users from anytime and anywhere! In addition, the ET-7000/PET-7000 also supports Modbus/TCP protocol that makes perfect integration to SCADA software.

Furthermore, PET-7000 features "PoE" that not only data but also power is carried through an Ethernet cable. This feature makes installation of PET-7000 a piece of cake. Imagine that no more unnecessary wires, only an Ethernet cable takes care of everything in the field.

The ET-7026/PET-7026 is a multi-function module, there are 6-channel analog inputs, 2-channel analog output, 2-channel digital inputs and 2-channel digital outputs module. It provides programmable input range on all analog inputs (+/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mV, 0~20 mA and 4~20 mA), analog outputs are 12 bit with +/-5 V, +/-10 V, 0~20 mA and 4~20 mA and digital output can be set alarm output. Each analog input is allowed to configure an individual range and has 240 V_{rms} high overvoltage protection. Jumper selectable for voltage or current of inputs/outputs

Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.

System Specifications

Models	ET-7026	PET-7026
Software		
Built-In Web Server	Yes	
Web HMI	Yes	
I/O Pair Connection	Yes	
Communication		
Ethernet Port	10/100 Base-TX with Auto MDI/MDI-X	
Protocol	Modbus/TCP, Modbus/UDP	
Security	ID, Password and IP Filter	
Dual Watchdog	Yes, Module (0.8 second), Communication (Programmable)	
LED Indicators		
L1 (System Running)	Yes	
L2 (Ethernet Link/Act)	Yes	
L3 (Ethernet 10/100 M Speed)	Yes	
PoE Power	-	Yes
2 Way Isolaiton		
Ethernet	1500 Vdc	-
I/O	2500 Vdc	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	
Power Requirements		
Reverse Polarity Protectionn	Yes	
Powered from terminal block	Yes, 10 ~ 30 Vdc	Yes, 12 ~ 48 Vdc
Powered from PoE	-	Yes, IEEE 802.3af, Class1
Consumption	3.1 W	4.2 W
Mechanical		
Dimensions (W x L x D)	72 mm x 123 mm x 35 mm	
Installation	DIN-Rail or Wall mounting	
Environment		
Operating Temperature	-25 °C ~ +75 °C	
Storage Temperature	-30 °C ~ +80 °C	
Humidity	10 ~ 90% RH, non-condensing	

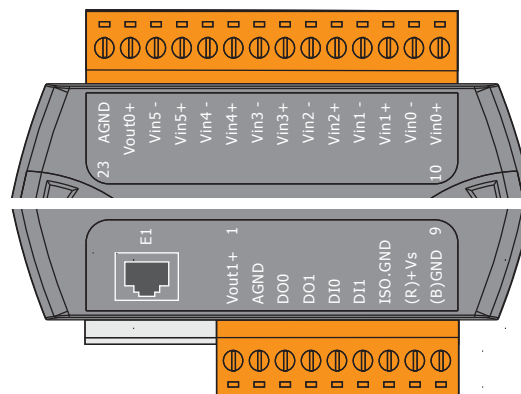
I/O Specifications

Analog Input		
Input Channels		6 (Differential)
Input Type		+/- 500 mV, +/- 1V, +/- 5 V, +/-10 V + 0 mA ~ + 20 mA, +/- 20 mA, 4 ~ 20 mA (jumper selectable)
Individual Channel Configuration		Yes
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	10 Samples/Sec. (Total)
	Fast Mode	60 Samples/Sec. (Total)
Accuracy	Normal Mode	+/-0.1%
	Fast Mode	+/-0.5% or better
Zero Drift		+/-20 uV/°C
Span Drift		+/-25 ppm/°C
Overvoltage Protection		240 V _{rms}
Input Impedance		2 MΩ
Common Mode Rejection		86 dB Min.
Normal Mode Rejection		100 dB
Analog Output		
Output Channels		2
Output Type		+ 0 V _{oc} ~ + 5 V _{oc} , +/- 5 V _{oc} , + 0 V _{oc} ~ + 10 V _{oc} , +/- 10 V _{oc} ,+ 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		
Input Channels		2
Dry Contact (Source)	On Voltage Level	Close to GND
	Off Voltage Level	Open
	Effective Distance for Dry Contact	500M max.
Wet contact (Sink/Source)	On Voltage Level	+ 1 V _{oc} max.
	Off Voltage Level	+ 3.5 V _{oc} ~ + 30 V _{oc}
Counters	Channels	2
	Max. Counts	4,294,967,285 (32-bit)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Overvoltage Protection		30 V _{oc}
Digital Output		
Output Channels		2
Type		Isolated Open Collector (Sink)
Max. Load Current		700 mA/Channel
Load Voltage		+ 5 V _{oc} ~ + 50 V _{oc}
Overvoltage Protection		60 V _{oc}
Overload Protection		1.4 A
Short-circuit Protection		Yes
Power On Value		Yes, Programmable
Safe Value		Yes, Programmable

Ordering Information

ET-7026 CR	Multifunction Module (RoHS)
PET-7026 CR	Multifunction PoE Module (RoHS)

Pin Assignment



Wire Connection

Voltage Input		
	JUMPER Default	
Current Input		
	JUMPER Default	
Voltage Output		
	JUMPER Default	
Current Output		
	JUMPER Default	
Digital Input/ Counter	ON State Readback as 1	OFF State Readback as 0
Dry Contact		
Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)		

Accessories

	NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch; requires 24 V _{oc} Input (RoHS)
	NS-205PSE CR	Unmanaged Ethernet switch with 4-PoE and 1 RJ45 uplink; requires 48 V _{oc} Input (RoHS)
	NS-205PSE-24V CR	Unmanaged Ethernet switch with 4-PoE and 1 RJ45 uplink; requires 24 V _{oc} Input (RoHS)
	MDR-20-24 CR	24V/1A, 24 W Power Supply with DIN-Rail Mounting (RoHS)
	DIN-KA52F-48 CR	48V/0.52A, 25 W Power Supply with DIN-Rail Mounting (RoHS)