



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 Isolation		
Ethernet	1500 Voc	-
I/O	2500 Voc	2500 Voc
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 Protection	Yes	
Powered from terminal block	Yes, 10 ~ 30 Voc	Yes, 12 ~ 48 Voc
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	

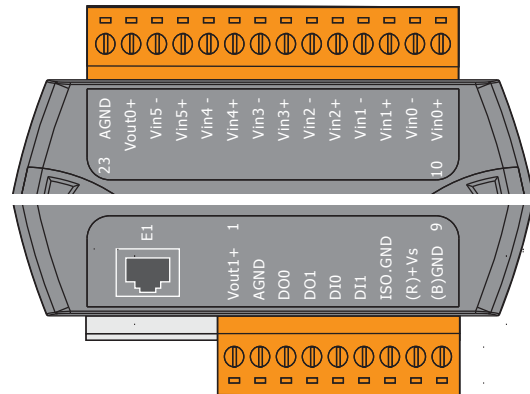
I/O Specifications

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 μ V/°C	
Span Drift	+/- 25 ppm/°C	
Overvoltage Protection	240 V _{rms}	
Input Impedance	2 M Ω	
Common Mode Rejection	86 dB Min.	
Normal Mode Rejection	100 dB	
Analog Output		
Output Channels	2	
Output Type	+ 0 V _{DC} ~ + 5 V _{DC} , +/- 5 V _{DC} , + 0 V _{DC} ~ + 10 V _{DC} , +/- 10 V _{DC} , + 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 _{DC} max.
	Off Voltage Level	+ 3.5 V _{DC} ~ + 30 V _{DC}
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 _{DC}	
Digital Output		
Output Channels	2	
Type	Isolated Open Collector (Sink)	
Max. Load Current	700 mA/Channel	
Load Voltage	+ 5 V _{DC} ~ + 50 V _{DC}	
Overvoltage Protection	60 V _{DC}	
Overload Protection	1.4 A	
Short-circuit Protection	Yes	
Power On Value	Yes, Programmable	
Safe Value	Yes, Programmable	

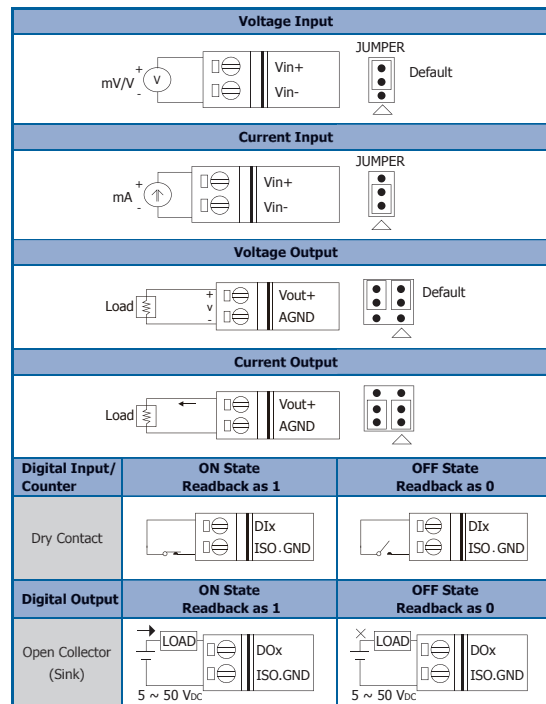
Ordering Information

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

Pin Assignment



Wire Connection



Accessories

NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch; requires 24 V _{DC} Input (RoHS)
NS-205PSE CR	Unmanaged Ethernet switch with 4-PoE and 1 RJ45 uplink; requires 48 V _{DC} Input (RoHS)
NS-205PSE-24V CR	Unmanaged Ethernet switch with 4-PoE and 1 RJ45 uplink; requires 24 V _{DC} 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)