



### DI and DO 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
  - DI/Counter: 8 Channels
  - DO: 8 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.

### Applications

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

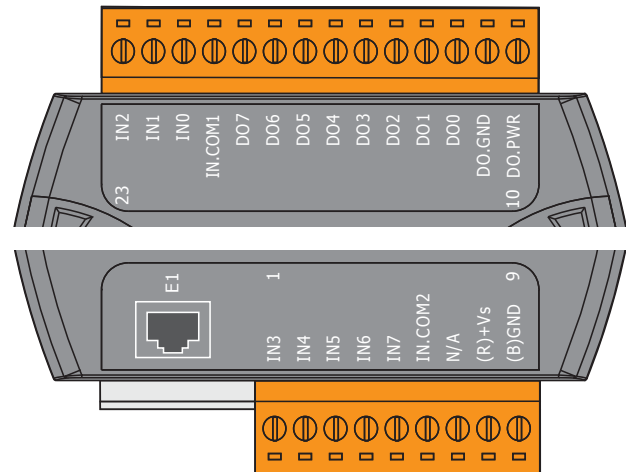
### System Specifications

Models	ET-7044	PET-7044
<b>Software</b>		
Built-In Web Server	Yes	
Web HMI	Yes	
I/O Pair Connection	Yes	
<b>Communication</b>		
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)	
<b>LED Indicators</b>		
L1 (System Running)	Yes	
L2 (Ethernet Link/Act)	Yes	
L3 (Ethernet 10/100 M Speed)	Yes	
PoE Power	-	Yes
<b>2 Way Isolation</b>		
Ethernet	1500 V <sub>dc</sub>	-
I/O	3750 V <sub>rms</sub>	3750 V <sub>rms</sub>
<b>EMS Protection</b>		
ESD (IEC 61000-4-2)	4 kV Contact for each terminal	
EFT (IEC 61000-4-4)	+/- 2 kV for Power	
<b>Power Requirements</b>		
Reverse Polarity Protection	Yes	
Powered from terminal block	Yes, 10 ~ 30 V <sub>dc</sub>	Yes, 12 ~ 48 V <sub>dc</sub>
Powered from PoE	-	Yes, IEEE 802.3af, Class1
Consumption	2.4 W	4.3 W
<b>Mechanical</b>		
Dimensions (W x L x D)	72 mm x 123 mm x 35 mm	
Installation	DIN-Rail or Wall mounting	
<b>Environment</b>		
Operating Temperature	-25 °C ~ +75 °C	
Storage Temperature	-30 °C ~ +80 °C	
Humidity	10 ~ 90% RH, non-condensing	

### I/O Specifications

Digital Input/Counter		
Input Channels	8	
Type	Wet Contact (Sink, Source)	
On Voltage Level	+10 V <sub>DC</sub> ~ +50 V <sub>DC</sub>	
Off Voltage Level	+4 V <sub>DC</sub> max.	
Input Impedance	10 kΩ	
Counters	Max. Count	4,294,967,285 (32 bits)
	Max. Input Frequency	500 Hz
	Min. Pulse Width	1 ms
Overvoltage Protection	+70 V <sub>DC</sub>	
Digital Output		
Output Channels	8	
Type	Isolated Open Collector (Sink)	
Max. Load Current	300 mA/channel at 25 °C Direct drive power relay module	
Load Voltage	+10 V <sub>DC</sub> ~ +40 V <sub>DC</sub>	
Overvoltage Protection	60 V <sub>DC</sub>	
Overload Protection	1.1 A	
Short-circuit Protection	Yes	
Power On Value	Yes, Programmable	
Safe Value	Yes, Programmable	

### Pin Assignment



### Wire Connection

Digital Input/Counter	Readback as 1 +10 ~ +50 V <sub>DC</sub>	Readback as 0 OPEN or <4 V <sub>DC</sub>
Sink		
Source		
Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance Load		

### Ordering Information

ET-7044 CR	8-channel DI and 8-channel DO with 32-bit Counters Module (RoHS)
PET-7044 CR	8-channel DI and 8-channel DO with 32-bit Counters PoE Module (RoHS)

### Accessories

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