



**ET-7044
PET-7044**

**ET-7244
PET-7244**

Ethernet I/O Module with 8-channel DI, 8-channel DO

Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Security
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog
- Wide Operating Temperature Range: -25 to +75°C
- I/O Pair Connection
- Built-in I/O
 - DI/Counter: 8 Channels
 - DO: 8 Channels



Introduction

The ET-7044/PET-7044/ET-7244/PET-7244 provides 8 wet contact digital input channels and 8 sink-type digital output channels. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-to-channel isolation. Each input channel can be used as a 32-bit counter and each output channel can drive 300 mA load. The power-on value and safe value of digital output channel are programmable. It can safely be used in applications where hazardous voltages are present.

System Specifications

| Model | ET-7044 | PET-7044 | ET-7244 | PET-7244 |
|-----------------------------|--|---------------------------|---|---------------------------|
| Software | | | | |
| Built-in Web Server | | | Yes | |
| Web HMI | | | Yes | |
| I/O Pair Connection | | | Yes | |
| Communication | | | | |
| Ethernet Port | 1 x RJ-45, 10/100 Base-TX | | 2 x RJ-45, 10/100 Base-TX, Switch Ports | |
| PoE | - | Yes | - | Yes |
| Protocol | Modbus TCP, Modbus UDP | | | |
| Security | ID, Password and IP Filter | | | |
| Dual Watchdog | Yes, Module (0.8 seconds), Communication (Programmable) | | | |
| LED Indicators | | | | |
| for System Running | | | Yes | |
| for Ethernet Link/Act | | | Yes | |
| for DI/DO status | | - | | Yes |
| for PoE Power | - | Yes | - | Yes |
| 2-Way Isolation | | | | |
| Ethernet | 1500 Vdc | - | 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 Line | | | |
| Power | | | | |
| Reverse Polarity Protection | Yes | | | |
| Powered from Terminal Block | 10 ~ 30 VDC | 12 ~ 48 VDC | 12 ~ 48 VDC | 12 ~ 48 VDC |
| Powered from PoE | - | Yes, IEEE 802.3af, Class1 | - | Yes, IEEE 802.3af, Class1 |
| Consumption | 2.5 W (Max.) | 2.5 W (Max.) | 3.3 W (Max.) | 3.5 W (Max.) |
| Mechanical | | | | |
| Dimensions (L x W x H) | 123 mm x 72 mm x 35 mm | | 120 mm x 76 mm x 38 mm | |
| Installation | DIN-Rail or Wall Mounting | | | |
| Environment | | | | |
| Operating Temperature | -25 to +75°C | | | |
| Storage Temperature | -30 to +80°C | | | |
| Humidity | 10 to 90% RH, Non-condensing | | | |

I/O Specifications

| Model | ET-7044 | PET-7044 | ET-7244 | PET-7244 |
|------------------------------|--|--|---------|----------|
| Digital Input/Counter | | | | |
| Channels | 8 | | | |
| Contact | Wet Contact | | | |
| Sink/Source (NPN/PNP) | Sink/Source | | | |
| On Voltage Level | +10 Vdc ~ +50 Vdc | | | |
| Off Voltage Level | +4 Vdc Max. | | | |
| Input Impedance | 10 kΩ | | | |
| Counters | Max. Count | 4,294,967,295 (32 bits) | | |
| | Max. Input Frequency | 500 Hz | 100 Hz | |
| | Min. Pulse Width | 1 ms | 5 ms | |
| Overvoltage Protection | +70 Vdc | | | |
| Digital Output | | | | |
| Channels | 8 | | | |
| Type | Isolated Open Collector | | | |
| Sink/Source (NPN/PNP) | Sink | | | |
| Max. Load Current | 300 mA/channel at 25°C Direct Drive Power Relay Module | 650 mA/channel at 25°C Direct Drive Power Relay Module | | |
| Load Voltage | +10 Vdc ~ +40 Vdc | +3.5 Vdc ~ +50 Vdc | | |
| Overvoltage Protection | 60 Vdc | | | |
| Overload Protection | 1.4 A | | | |
| Short-circuit Protection | Yes | | | |
| Power-on Value | Yes, Programmable | | | |
| Safe Value | Yes, Programmable | | | |

Wire Connections

| Digital Input/Counter | Readback as 1 | Readback as 0 |
|-----------------------|-------------------|--------------------|
| Sink | +10 ~ +50 Vdc | OPEN or <4 Vdc |
| | Source | +10 ~ +50 Vdc |

| Output Type | ON State Readback as 1 | OFF State Readback as 0 |
|-----------------|---------------------------|----------------------------|
| Drive Relay | | |
| Resistance Load | | |

Ordering Information

| | |
|--------------------|--|
| ET-7044 CR | Ethernet I/O Module with 8-channel Digital Input, 8-channel Digital Output (RoHS) |
| PET-7044 CR | PoE Ethernet I/O Module with 8-channel Digital Input, 8-channel Digital Output (RoHS) |
| ET-7244 CR | Ethernet I/O Module with 2-port Ethernet Switch, with 8-channel Digital Input, 8-channel Digital Output (RoHS) |
| PET-7244 CR | PoE Ethernet I/O Module with 2-port Ethernet Switch, with 8-channel Digital Input, 8-channel Digital Output (RoHS) |

Pin Assignments

