



ET-7042
ET-7042-UT
PET-7042

ET-7242
ET-7242-UT
PET-7242

Ethernet I/O Module with 16-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
 - Standard Series: -25 ~ +75°C
 - UT Series: -40 ~ +75°C
- I/O Pair Connection
- Built-in I/O
 - DO: 16 Channels



Introduction

The ET-7042/PET-7042/ET-7242/PET-7242 provides 16 sink-type digital output channels. It features optical isolation for 3750 VDC of transient overvoltage protection and doesn't have channel-to-channel isolation. The power-on value and safe value of digital output channel are programmable. In some industrial applications, the user can connect the output channel of ET-7042/PET-7042/ET-7242/PET-7242 to the RM series relay module to switch inductive loads.

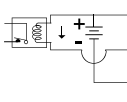
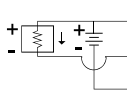
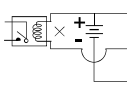
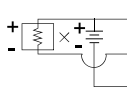
System Specifications

| Model | ET-7042 | PET-7042 | ET-7242 | PET-7242 |
|-----------------------------|--|---------------------------|---|---------------------------|
| 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 | | 3750 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 | | | |
| Surge (IEC 61000-4-5) | ±0.5 kV for Power Line | | ±2 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 | 2.7 W (Max.) | 2.6 W (Max.) | 3.2 W (Max.) | 3.4 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-7042 | PET-7042 | ET-7242 | PET-7242 |
|--------------------------|--|----------|--|----------|
| Digital Output | | | | |
| Channels | 16 | | | |
| Type | Isolated Open Collector | | | |
| Sink/Source (NPN/PNP) | Sink | | | |
| Max. Load Current | 100 mA/channel at 25°C Direct Drive Power Relay Module | | 650 mA/channel at 25°C Direct Drive Power Relay Module | |
| Load Voltage | +5 VDC ~ +30 VDC | | + 3.5 VDC ~ + 50 VDC | |
| Overvoltage Protection | - | 60 Vdc | | |
| Overload Protection | - | 1.3 A | | |
| Short-circuit Protection | - | Yes | | |
| Power-on Value | Yes, Programmable | | | |
| Safe Value | Yes, Programmable | | | |

Wire Connections

| Output Type | ON State Readback as 1 |
|-----------------|---|
| Drive Relay |  DO.PWR DOx DO.GND |
| Resistance Load |  DO.PWR DOx DO.GND |
| Output Type | OFF State Readback as 0 |
| Drive Relay |  DO.PWR DOx DO.GND |
| Resistance Load |  DO.PWR DOx DO.GND |

Ordering Information

| | |
|----------------------|---|
| ET-7042 CR | Ethernet I/O Module with 16-channel DO (RoHS), -25 to 75°C operating temperature |
| ET-7042-UT CR | Ethernet I/O Module with 16-channel DO (RoHS), -40 to 75°C operating temperature |
| PET-7072 CR | PoE Ethernet I/O Module with 16-channel DO (RoHS), -25 to 75°C operating temperature |
| ET-7242 CR | Ethernet I/O Module with 2-port Ethernet Switch, with 16-channel DO (RoHS), -25 to 75°C operating temperature |
| ET-7242-UT CR | Ethernet I/O Module with 2-port Ethernet Switch, with 16-channel DO (RoHS), -40 to 75°C operating temperature |
| PET-7242 CR | PoE Ethernet I/O Module with 2-port Ethernet Switch, with 16-channel DO (RoHS), -25 to 75°C operating temperature |

Pin Assignments

