



**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.

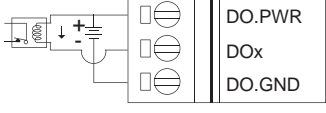
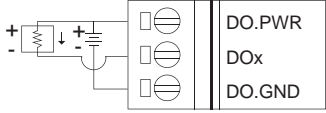
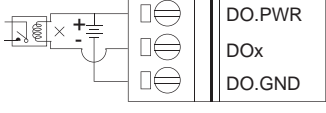
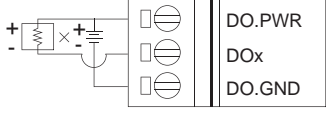
## System Specifications

Model	ET-7042	PET-7042	ET-7242	PET-7242
<b>Software</b>				
Built-in Web Server			Yes	
Web HMI			Yes	
I/O Pair Connection			Yes	
<b>Communication</b>				
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)			
<b>LED Indicators</b>				
for System Running			Yes	
for Ethernet Link/Act			Yes	
for DI/DO status		-		Yes
for PoE Power	-	Yes	-	Yes
<b>2-Way Isolation</b>				
Ethernet	1500 Vdc	-	1500 Vdc	-
I/O	2500 Vdc		3750 Vdc	
<b>EMS Protection</b>				
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	
<b>Power</b>				
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.)
<b>Mechanical</b>				
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			
<b>Environment</b>				
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
<b>Digital Output</b>				
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

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

## Pin Assignments

