



**ET-7042**  
**PET-7042**

**ET-7242**  
**PET-7242**

Ethernet I/O Module with 16-ch 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 ~ +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 Vrms 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.

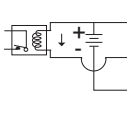
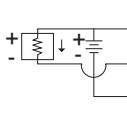
### System Specifications

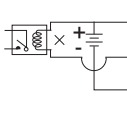
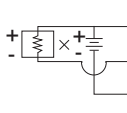
Models	ET-7042	PET-7042	ET-7242	PET-7242
<b>Software</b>				
Built-in Web Server			Yes	
Web HMI			Yes	
I/O Pair Connection			Yes	
<b>Communication</b>				
Ethernet Port	1 x RJ-45, 10/100 Base-TX		2 x RJ-45, 10/100 Base-TX, Switch Ports	
PoE	-	Yes	-	Yes
Protocol	Modbus TCP, Modbus UDP			
Security	ID, 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		2500 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			
<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	3.0 W	? W	? W
<b>Mechanical</b>				
Dimensions (W x L x H)	72 mm x 123 mm x 35 mm		76 mm x 120 mm x 38 mm	
Installation	DIN-Rail or Wall Mounting			
<b>Environment</b>				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

### I/O Specifications

Models	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			
Load Voltage	+5 Vdc ~ +30 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	 <table border="1"> <tr><td>DO.PWR</td></tr> <tr><td>DOx</td></tr> <tr><td>DO.GND</td></tr> </table>	DO.PWR	DOx	DO.GND
DO.PWR				
DOx				
DO.GND				
Resistance Load	 <table border="1"> <tr><td>DO.PWR</td></tr> <tr><td>DOx</td></tr> <tr><td>DO.GND</td></tr> </table>	DO.PWR	DOx	DO.GND
DO.PWR				
DOx				
DO.GND				

Output Type	OFF State Readback as 0			
Drive Relay	 <table border="1"> <tr><td>DO.PWR</td></tr> <tr><td>DOx</td></tr> <tr><td>DO.GND</td></tr> </table>	DO.PWR	DOx	DO.GND
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DO.PWR				
DOx				
DO.GND				

### Ordering Information

ET-7042 CR	Ethernet I/O Module with 16-ch DO (RoHS)
PET-7042 CR	PoE Ethernet I/O Module with 16-ch DO (RoHS)
ET-7242 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 16-ch DO (RoHS)
PET-7242 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 16-ch DO (RoHS)

### Pin Assignments

