



**ET-7044**  
**PET-7044**

**ET-7244**  
**PET-7244**

Ethernet I/O Module with 8-channels DI, 8-channels 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
  - 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 V<sub>rms</sub> 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

Models	ET-7044	PET-7044	ET-7244	PET-7244
<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 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	2.4 W	3.0 W	3.30 W (Max.)	3.50 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 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

## I/O Specifications

Models	ET-7044	PET-7044	ET-7244	PET-7244
<b>Digital Input/Counter</b>				
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			
<b>Digital Output</b>				
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 
	+10 ~ +50 Vdc 	OPEN or <4 Vdc 
Source	+10 ~ +50 Vdc 	OPEN or <4 Vdc 
	+10 ~ +50 Vdc 	OPEN or <4 Vdc 

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

## Ordering Information

Art. No. 120341	ET-7044 CR	Ethernet I/O Module with 8-channels DI, 8-channels DO (RoHS)
Art. No. 122270	PET-7044 CR	PoE Ethernet I/O Module with 8-channels DI, 8-channels DO (RoHS)
Art. No. 141429	ET-7244 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels DI, 8-channels DO (RoHS)
Art. No. 142799	PET-7244 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels DI, 8-channels DO (RoHS)

## Pin Assignments

