



## ET-7255 PET-7255

Ethernet I/O Module with 2-port Ethernet Switch,  
8-ch DI, 8-ch DO

### Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Access Control
- 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
- Dual Watchdog
- I/O Pair Connection
- Built-in I/O
  - DI/Counter: 8 Channels
  - DO: 8 Channels



### Introduction

The ET-7255/PET-7255 provides 8 dry/wet contact digital input channels and 8 source-type digital output channels. It features optical isolation for 2500 VDC 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 650 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.

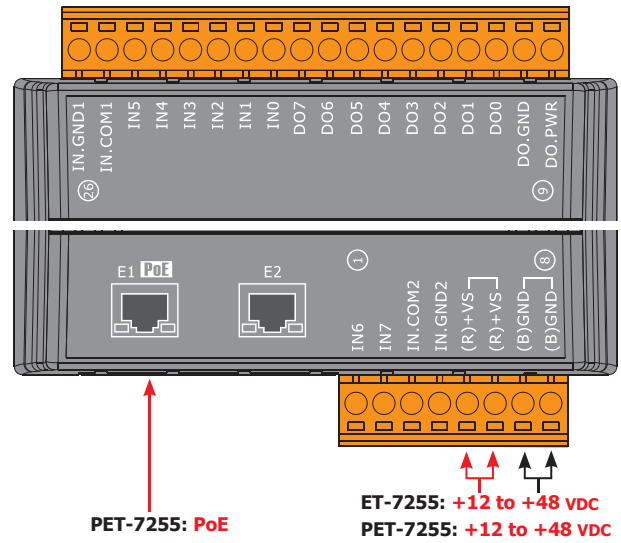
### System Specifications

Model	ET-7255	PET-7255
<b>Software</b>		
Built-in Web Server	Yes	
<b>CPU Module</b>		
Watchdog Timer	Module, Communication (Programmable)	
<b>2-Way Isolation</b>		
Ethernet	1500 VDC	-
I/O	2500 VDC	
<b>EMS Protection</b>		
EFT (IEC 61000-4-4)	±2 kV for Power Line	
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal ±8 kV Air for Random Point	
Surge (IEC 61000-4-5)	±2 kV for Power Line	
<b>LED Indicators</b>		
Status	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE
<b>Ethernet</b>		
Ports	2 x RJ-45, 10/100 Base-TX, Switch Ports	
PoE	-	Yes
LAN bypass	Yes	
Access Control	ID, Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP	
<b>Power</b>		
Reverse Polarity Protection	Yes	
Consumption	3.9 W (max.)	4.0 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1
Powered from Terminal Block	+12 to +48 VDC	
<b>Mechanical</b>		
Dimensions (mm)	76 x 120 x 38 (W x L x H)	
Installation	DIN-Rail mounting	
<b>Environment</b>		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

## I/O Specifications

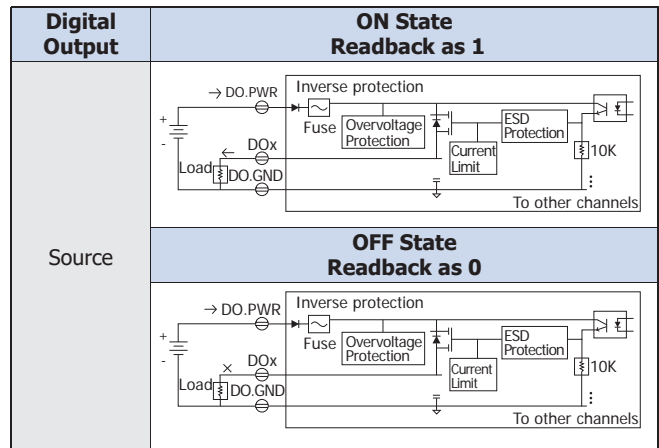
Model	ET-7255	PET-7255
<b>Digital Input/Counter</b>		
Channels	8	
Type	Dry Contact, Wet Contact	
Sink/Source (NPN/PNP)	Dry: Source Wet: Sink/Source	
ON Voltage Level	Dry	Close to GND
	Wet	+10 to +50 VDC
OFF Voltage Level	Dry	Open
	Wet	+4 VDC (max.)
Max. Counts	4,294,967,295 (32-bit)	
Frequency	100 Hz	
Min. Pulse Width	5 ms	
Effective Distance	500m (max.)	
Input Impedance	10 kΩ	
Overvoltage Protection	+70 VDC	
<b>Digital Output</b>		
Channels	8	
Type	Isolated Open Collector	
Sink/Source (NPN/PNP)	Source	
Load Voltage	+10 to +40 VDC	
Load Current	650 mA/channel at 25°C	
Overvoltage Protection	+47 VDC	
Short-circuit Protection	Yes	
Power on Value	Programmable	
Safe Value	Programmable	

## Pin Assignments



## Wire Connections

Digital Input /Counter	Readback as 1	Readback as 0
Wet Contact (Sink)	+10 ~ +50 VDC 	OPEN or <4 VDC 
	Wet Contact (Source)	+10 ~ +50 VDC 



Digital Input /Counter	ON State Readback as 1	OFF State Readback as 0
Dry Contact		

## Ordering Information

<b>ET-7255 CR</b>	Ethernet I/O Module with 2-port Ethernet Switch, 8-ch DI, 8-ch DO (RoHS)
<b>PET-7255 CR</b>	PoE I/O Module with 2-port Ethernet Switch, 8-ch DI, 8-ch DO (RoHS)