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Ethernet I/O Products

ET-7052
PET-7052
ET-7252
PET-7252

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

CE FC RoHS

Introduction

The ET-7052/PET-7052/ET-7252/PET-7252 provides 8 wet contact digital input channels and 8 source-type digital output channels. It features optical isolation for 3750 Vrms 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.
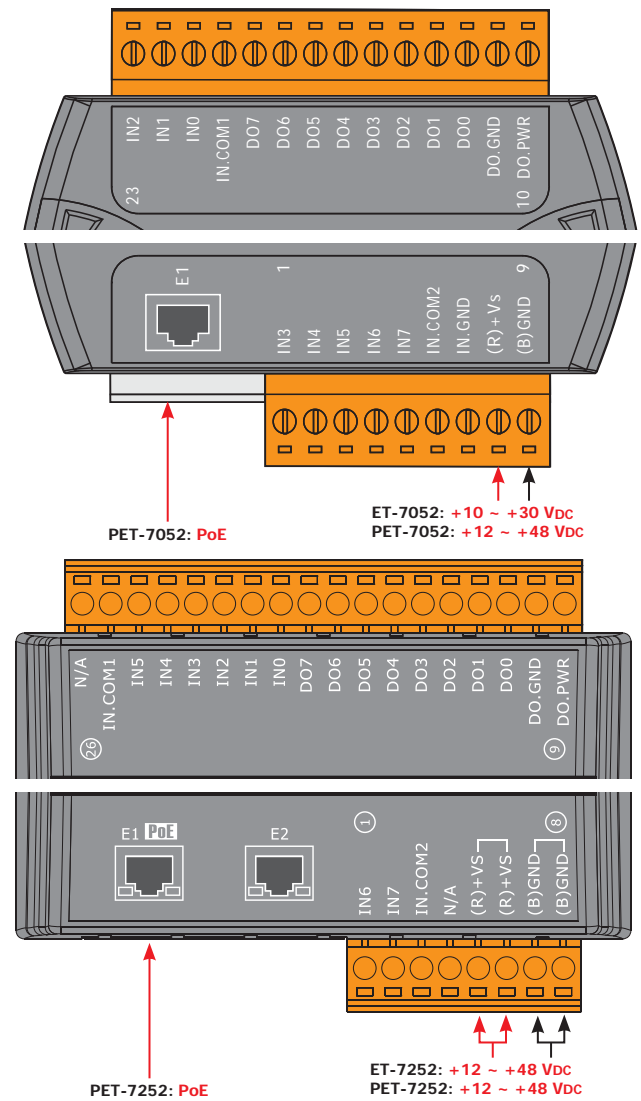
System Specifications

Models	ET-7052	PET-7052	ET-7252	PET-7252
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, Swtich 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 V$_{DC}$	-	1500 V$_{DC}$	-
I/O	2500 V$_{DC}$		2500 V$_{DC}$	
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 Line		±2 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 V$_{DC}$	12 ~ 48 V$_{DC}$	12 ~ 48 V$_{DC}$	12 ~ 48 V$_{DC}$
Powered from PoE	-	Yes, IEEE 802.3af, Class1	-	Yes, IEEE 802.3af, Class1
Consumption	2.4 W	3.0 W	3.5 W	4.0 W
Mechanical				
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			
Environment				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

■ I/O Specifications

Models	ET-7052	PET-7052	ET-7252	PET-7252
Digital Input/Counter				
Channels	8			
Contact	Wet Contact			
Sink/Source (NPN/PNP)	Sink/Source			
On Voltage Level	+10 V$_{DC}$ ~ +50 V$_{DC}$			
Off Voltage Level	+4 V$_{DC}$ Max.			
Input Impedance	10 kΩ			
Counters — Max. Count	4,294,967,295 (32 bits)			
Counters — Max. Input Frequency	500 Hz		100 Hz	
Counters — Min. Pulse Width	1 ms		5 ms	
Overvoltage Protection	+70 V$_{DC}$			
Digital Output				
Channels	8			
Type	Isolated Open Collector			
Sink/Source (NPN/PNP)	Source			
Max. Load Current	650 mA/channel at 25°C			
Load Voltage	+10 V$_{DC}$ ~ +40 V$_{DC}$			
Overvoltage Protection	47 V$_{DC}$			
Overload Protection	-			
Short-circuit Protection	Yes			
Power-on Value	Yes, Programmable			
Safe Value	Yes, Programmable			

■ Pin Assignments

PET-7052: PoE

ET-7052: +10 ~ +30 V$_{DC}$
PET-7052: +12 ~ +48 V$_{DC}$

PET-7252: PoE

ET-7252: +12 ~ +48 V$_{DC}$
PET-7252: +12 ~ +48 V$_{DC}$

■ Wire Connections

Digital Input/Counter	Readback as 1	Readback as 0
Sink	+10 ~ +50 V$_{DC}$	OPEN or <4 V$_{DC}$
Source	+10 ~ +50 V$_{DC}$	OPEN or <4 V$_{DC}$

Digital Output	ON State Readback as 1	OFF State Readback as 0
Source		

■ Ordering Information

ET-7052 CR	Ethernet I/O Module with 8-channels DI, 8-channels DO (RoHS)
PET-7052 CR	PoE Ethernet I/O Module with 8-channels DI, 8-channels DO (RoHS)
ET-7252 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels DI, 8-channels DO (RoHS)
PET-7252 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels DI, 8-channels DO (RoHS)