ET-7053 ET-7253
PET-7053 PET-7253

Ethernet I/O Module with 16-channels DI

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: 16 Channels

Introduction

The ET-7053/PET-7053/ET-7253/PET-7253 provides 16 dry contact digital input channels. Each input channel can be used as a 32-bit counter. It features optical isolation for 3750 Vrms of transient overvoltage protection but doesn't provide channel-to-channel isolation. It can safely be used in applications where hazardous voltages are present.
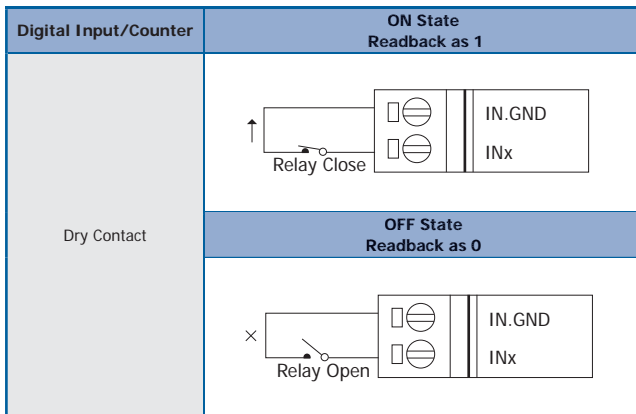
System Specifications

Models	ET-7053	PET-7053	ET-7253	PET-7253
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			
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	2.7 W (Max.)	2.8 W (Max.)	3.7 W (Max.)	4.1 W (Max.)
Mechanical				
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			
Environment				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

I/O Specifications

Models	ET-7053	PET-7053	ET-7253	PET-7253
Digital Input/Counter				
Channels	16			
Contact	Dry Contact			
Sink/Source (NPN/PNP)	Source			
On Voltage Level	Close to GND			
Off Voltage Level	Open			
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	-			
Effective Distance	500 M Max.			

Wire Connections

Digital Input/Counter	ON State Readback as 1
Dry Contact	Relay Close — IN.GND / INx
	OFF State Readback as 0
	Relay Open — IN.GND / INx

Ordering Information

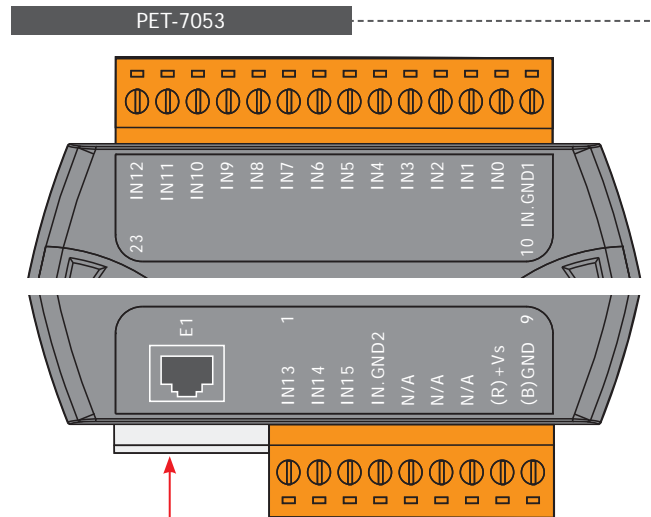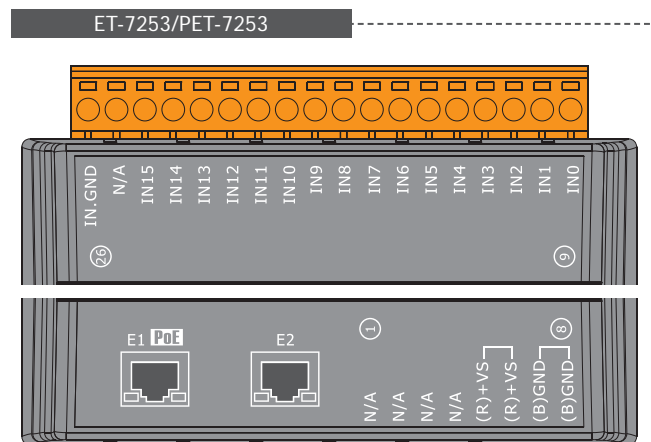|	
ET-7053 CR	Ethernet I/O Module with 16-channels DI (RoHS)
PET-7053 CR	PoE Ethernet I/O Module with 16-channels DI (RoHS)
ET-7253 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 16-channels DI (RoHS)
PET-7253 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 16-channels DI (RoHS)

Pin Assignments
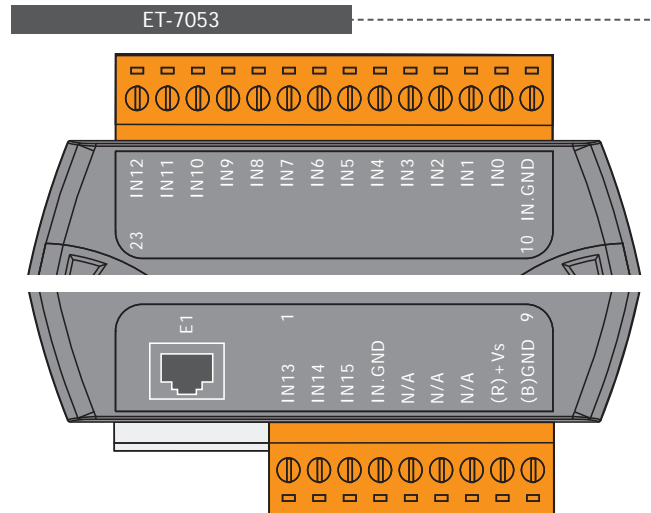
ET-7053

ET-7053: +10 ~ +30 VDC

PET-7053

PET-7053: PoE   **PET-7053: +12 ~ +48 V**DC

ET-7253/PET-7253

PET-7253: PoE

ET-7253: +12 ~ +48 VDC
PET-7253: +12 ~ +48 VDC