



ET-7050
PET-7050

ET-7250
PET-7250

Ethernet I/O Module with 12-ch DI, 6-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
 - DI/Counter: 12 Channels
 - DO: 6 Channels



Introduction

The ET-7050/PET-7050/ET-7250/PET-7250 provides 12 wet contact digital input channels and 6 sink-type digital output channels. It features optical isolation for 3750 V_{rms} 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 100 mA load. 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-7050/PET-7050/ET-7250/PET-7250 to the RM series relay module to switch inductive loads.

System Specifications

Models	ET-7050	PET-7050	ET-7250	PET-7250
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, 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)			
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 Vdc	-	1500 Vdc	-
I/O	2500 Vdc		2500 Vdc	
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			
Power				
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	? W	? 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-7050	PET-7050	ET-7250	PET-7250
Digital Input/Counter				
Channels	12			
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	4,294,967,285 (32 bits)		
	Max. Input Frequency	500 Hz		
	Min. Pulse Width	1 ms		
Overvoltage Protection	+70 Vdc			
Digital Output				
Channels	6			
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

Digital Input/Counter	Readback as 1	Readback as 0
Sink	+10 ~ +50 Vdc 	OPEN or <4 Vdc
	Source	+10 ~ +50 Vdc

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

Ordering Information

ET-7050 CR	Ethernet I/O Module with 12-ch DI, 6-ch DO (RoHS)
PET-7050 CR	PoE Ethernet I/O Module with 12-ch DI, 6-ch DO (RoHS)
ET-7250 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 12-ch DI, 6-ch DO (RoHS)
PET-7250 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 12-ch DI, 6-ch DO (RoHS)

Pin Assignments

