

Ethernet I/O Module with 6-channel Relay, 6-channel DI

#### **■** Introduction

The ETA-7060/PETA-7060 provides 6 wet contact digital input channels and 6 form A electromechanical relays. It features optical isolation for 3000 VDC of transient overvoltage protection. Each input channel can be used as a 32-bit counter. The power-on value and safe value of relay are programmable.

Note: When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life. Limit these flyback voltages at your inductive load by installing a flyback diode for DC loads or a metal oxide varistor for AC loads.

#### **■ System Specifications**

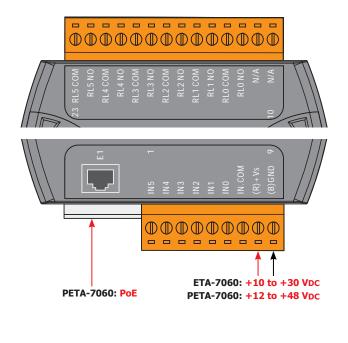
Model	ETA-7060	PETA-7060	
Software			
Built-in Web Server	Yes		
CPU Module			
Watchdog Timer	Module, Communication (Programmable)		
2-Way Isolation			
Ethernet	1500 VDC	-	
I/O	3000	) VDC	
EMS Protection			
EFT (IEC 61000-4-4)	±2 kV for Power Line		
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal and ±8 kV Air for Random Point		
Surge (IEC 61000-4-5)	±0.5 kV for Power Line		
LED Indicators			
Status	Run, Ethernet	Run, Ethernet, PoE	
Ethernet			
Ports	1 x RJ-45, 10/100 Base-Tx		
PoE	-	Yes	
Security	Password and IP Filter		
Protocol	Modbus TCP, Modbus UDP, and MQTT		
Power			
Reverse Polarity Protection	Yes		
Consumption	2.2 W	2.5 W	
Powered from PoE	-	IEEE 802.3af, Class1	
Powered from Terminal Block	+10 to +30 VDC	+12 to +48 VDC	
Mechanical			
Dimensions (mm)	72 x 123 x 35 (W x L x H)		
Installation	DIN-Rail mounting		
Environment			
Operating Temperature	-25 to +75 °C		
Storage Temperature	-30 to +80 °C		
Humidity	10 to 90% RH, Non-condensing		

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# **■ I/O Specifications**

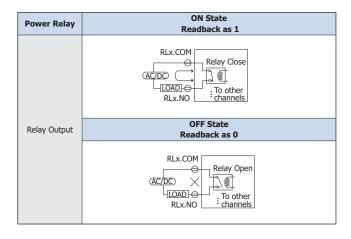
Model	ETA-7060	PETA-7060		
Digital Input/Counter				
Channels	6			
Contact	Wet Contact			
Sink/Source (NPN/PNP)	Sink/Source			
On Voltage Level	+10 to +50 VDC			
Off Voltage Level	+4 VDC (max.)			
Max. Counts	4,294,967,295 (32-bit)			
Frequency	3 kHz			
Min. Pulse Width	1 ms			
Input Impedance	10 kΩ			
Overvoltage Protection	+70 VDC			
Relay Output				
Channels	6			
Туре	Power Relay, Form A (SPST N.O.)			
Contact Rating	5 A @ 250 VAC/24 VDC (Resistive Load)			
Min. Contact Load	10 mA @ 5 V			
Operate Time	10 ms (max.)			
Release Time	5 ms (max.)			
Electrical Endurance	10 <sup>5</sup> ops.			
Mechanical Endurance	$2 \times 10^7$ ops.			
Power on Value	Programmable			
Safe Value	Programmable			

# **■ Pin Assignments**



#### **■ Wire Connections**

Digital Input/ Counter	Readback as 1	Readback as 0
Sink	+10 to +50 VDC	OPEN or <4 VDC
	INX 10K  +- IN.COM  To other channels	INX 10K  To other IN.COM  To other channels
Source	+10 to +50 VDC	OPEN or <4 VDC
	INX 10K  To other IN.COM  To other Channels	INx 10K  To other channels



# **■** Ordering Information

ETA-7060 CR	Ethernet I/O Module with 6-channel Relay Output and 6-channel Digital Input (RoHS)
PETA-7060 CR	PoE Ethernet I/O Module with 6-channel Relay Output and 6-channel Digital Input (RoHS)

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