



# PET-7060

6-channel Power Relay Output and 6-channel Isolation Digital Input with PoE

#### Features

- IEEE 802.3af-compliant Power over Ethernet (PoE)
- Built-in Web Server
- Communication Security
- Modbus/TCP Protocol
- 2-way Isolation/ESD Protection
- Built-in Dual Watchdog
- 10/100 Base-TX Ethernet
- I/O Pair Connection
- DO Type: 6 Power Relay (Form A)
- DI Type: 6 Wet Contact (Sink, Source)









### ■ Introduction

Power over Ethernet (PoE) allows power and data to be carried over a single Ethernet cable, so a device can operate solely from the power it receives through the data cable. This innovation allows greater flexibility in office design, higher efficiency in systems design, and faster turnaround time in set-up and implementation.

The PET-7060 feature true IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) using both Ethernet pairs (Category 5 Ethernet cable). The PET-7060 can receives power from an auxiliary power sources like AC adapters and battery in addition to the PoE enabled network. This is a desirable feature when the total system power requirements exceed the PSE's load capacity. Furthermore, with the auxiliary power option, the PET-7060 can be used in a standard Ethernet (non-PoE) system

The PET-7060, a web-based PoE Ethernet I/O module, features a built-in web server, which allows configuration, I/O monitoring and I/O control by simply using a regular web browser. Besides, with the web HMT function, no more programming or HTML skills are needed; creating dynamic and attractive web pages for I/O monitoring and I/O control would be fun to engineers ever after. The PET-7060 offers easily and safely access for users from anytime and anywhere! In addition, the PET-7060 also supports Modbus/TCP protocol that makes perfect integration for PET-7060 to SCADA software.

The PET-7060 provides 6 power relay (form A) output and 6 isolated wet contact (sink, source type) digital input channels. Each power relay supports contact rating as 5 A @ 250  $V_{AC}$  or 5 A @ 30  $V_{AC}$  and each digital input channel supports counter input (32 bits and 500 Hz Max.).

#### Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.

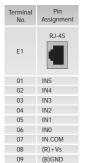
## I/O Specifications

	Relay Output		
	Output Channels		6
Output T		e	Power Relay, Form A (SPST N.O.)
	Operating Voltage Range		250 VAC/30 VDC
	Max. Load Current		5.0A/channel at 25 °C
	Operate Time Release Time		6 ms
			3 ms
	Electrical VDF		5A 250 V <sub>AC</sub> 30,000 ops (10 ops/minute) at 75 °C
	Life	VDE	5A 30 Voc 70,000 ops (10 ops/minute) at 75 °C
	(Resistive	UL	5A 250 Vac/30 Voc 6,000 ops.
	Load)		3A 250 Vac/30 Voc 100,000 ops.
	Mechanical Life		20,000,000 ops. at no load (300 ops./minute)
	Digital Input		
	Input Char	nels	6
	Input Type On Voltage Level Off Voltage Level		Wet Contact (Sink, Source)
			+10 Vpc ~ +50 Vpc
			+4 Voc 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 V <sub>DC</sub>

## System Specifications

System	Boystem opecineations			
SRAM	System			
Flash Memory   512 KB	CPU		80186 CPU (80 MHz)	
EEPROM	SRAM		512 KB	
Dual Watchdog   Yes	Flash Me	mory	512 KB	
Communication	EEPROM		16 KB	
PoE Ethernet Port	Dual Wat	chdog	Yes	
2-Way Isolation  Ethernet	Communica	Communication		
Ethernet	PoE Ethe	rnet Port	10/100 Base-TX (With link, activity led indicator) and auto MDI/MDI-X connection	
I/O	2-Way Isola	ation		
To   Relay Output   3000 Vms	Ethernet		1500 V <sub>rms</sub>	
Relay Output   3000 V <sub>ms</sub>	1/0	DI	3750 V <sub>rms</sub>	
PoE         PoE On           L1         Run           L2         Link/Act           L3         10/100M           Power Requirements           IEEE 802.3af         Class 1           Powered by Power over Ethernet (PoE) or auxiliary power +12 Voc ~ +48 Voc (non-regulated)           LED Indicator         Yes           Power Consumption         0.12 A @ 24 Voc Max.           Mechanical         Dimensions (W x H x D)           Dimensions (W x H x D)         72 mm x 123 mm x 35 mm           Installation         DIN-Rail or Wall mounting           Environment         -25 °C ~ +75 °C           Storage Temperature         -30 °C ~ +80 °C	1/0	Relay Output	3000 V <sub>rms</sub>	
L1 Run  L2 Link/Act L3 10/100M  Power Requirements  IEEE 802.3af Class 1  Required Supply Voltage auxiliary power + 12 Voc ~ + 48 Voc (non-regulated)  LED Indicator Yes  Power Consumption 0.12 A @ 24 Voc Max.  Mechanical  Dimensions (W x H x D) 72 mm x 123 mm x 35 mm  Installation DIN-Rail or Wall mounting  Environment  Operating Temperature -25 °C ~ +75 °C  Storage Temperature -30 °C ~ +80 °C	LED Indicat	tors		
L2 Link/Act L3 10/100M  Power Requirements  IEEE 802.3af Class 1  Required Supply Voltage (non-regulated)  LED Indicator Yes  Power Consumption 0.12 A @ 24 Voc Max.  Mechanical  Dimensions (W x H x D) 72 mm x 123 mm x 35 mm  Installation DIN-Rail or Wall mounting  Environment  Operating Temperature -25 °C ~ +75 °C  Storage Temperature -30 °C ~ +80 °C	PoE		PoE On	
L3 10/100M  Power Requirements  IEEE 802.3af Class 1  Powered by Power over Ethernet (PoE) or auxiliary power +12 Voc ~ +48 Voc (non-regulated)  LED Indicator Yes  Power Consumption 0.12 A @ 24 Voc Max.  Mechanical  Dimensions (W x H x D) 72 mm x 123 mm x 35 mm  Installation DIN-Rail or Wall mounting  Environment -25 °C ~ +75 °C  Storage Temperature -30 °C ~ +80 °C	L1		Run	
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IEEE 802.3af     Class 1       Required Supply Voltage     Powered by Power over Ethernet (PoE) or auxiliary power +12 Voc ~ +48 Voc (non-regulated)       LED Indicator     Yes       Power Consumption     0.12 A @ 24 Voc Max.       Mechanical     Dimensions (W x H x D)       Dimensions (W x H x D)     72 mm x 123 mm x 35 mm       Installation     DIN-Rail or Wall mounting       Environment     -25 °C ~ +75 °C       Storage Temperature     -30 °C ~ +80 °C	L3		10/100M	
Required Supply Voltage Requir	Power Requ	Power Requirements		
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Power Consumption         0.12 A @ 24 Voc Max.           Mechanical         Dimensions (W x H x D)         72 mm x 123 mm x 35 mm           Installation         DIN-Rail or Wall mounting           Environment         Operating Temperature         -25 °C ~ +75 °C           Storage Temperature         -30 °C ~ +80 °C	Required Supply Voltage		auxiliary power +12 Vpc ~ +48 Vpc	
Mechanical         Dimensions (W x H x D)         72 mm x 123 mm x 35 mm           Installation         DIN-Rail or Wall mounting           Environment         Operating Temperature         -25 °C ~ +75 °C           Storage Temperature         -30 °C ~ +80 °C	LED Indi	cator	Yes	
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Installation         DIN-Rail or Wall mounting           Environment         Operating Temperature         -25 °C ~ +75 °C           Storage Temperature         -30 °C ~ +80 °C	Mechanical			
Environment         Operating Temperature         -25 °C ~ +75 °C           Storage Temperature         -30 °C ~ +80 °C	Dimensions (W x H x D)		72 mm x 123 mm x 35 mm	
Operating Temperature	Installation		DIN-Rail or Wall mounting	
Storage Temperature -30 °C ~ +80 °C	Environment			
The state of the s	Operating Temperature		-25 °C ~ +75 °C	
Humidity 5 ~ 90% RH, non-condensing			-30 °C ~ +80 °C	
	Humidity		5 ~ 90% RH, non-condensing	

## ☑ Pin Assignment \_\_\_\_\_\_





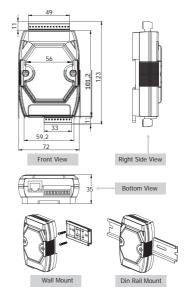
Terminal No.	Pin Assignment
23	RL5 COM
22	RL5 NO
21	RL4 COM
20	RL4 NO
19	RL3 COM
18	RL3 NO
17	RL2 COM
16	RL2 NO
15	RL1 COM
14	RL1 NO
13	RL0 COM
12	RL0 NO
11	N/A
10	N/A

## ✓ Wire Connection \_\_\_\_\_\_

Digital Output	Readback as 1	Readback as 0
	Relay On	Relay Off
Relay Output	RLx.COM Relay Close  AC/DC To other channels	RLx.COM Relay Open  ACCDC

Digital Input	Readback as 0	Readback as 1
	+10 ~ +50 Vpc	OPEN or <4 Vpc
Sink	DIX 10K	Dix 10K
	+10 ~ +50 Vpc	OPEN or <4 Vpc
Source	DIX 10K	Dix 10K

## ■ Dimensions (Unit: mm) \_\_\_\_\_



## ■ Ordering Information \_

PET-7060 CR 6-channel Power Relay Output and 6-channel Isolation Digital Input with PoE (RoHS)

## Accessories \_\_

NS-205PSE CR	Industrial 5-Port PoE Ethernet Switch (RoHS)
MDR-60-48	24V/1.25A, 60 W Power Supply with DIN-Rail Mounting

#### Related Products

Converters	USB, RS-232, Fiber Optical to RS-485 Converters and Repeaters
Power Supply	24 Voc Power Supply
Relay Module	External Relay Modules for ET-7000 DO Module

	Learning Kit	Starter Learning Kit	
	Application Books	Application Books Designed with Our Products	
	Data Logger Software	User Friendly Data Logger Software (free)	