PET-7060

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

Relay Output & Digital Input

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)

CE FC RoHS PoE

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 HMI 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_{DC} 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

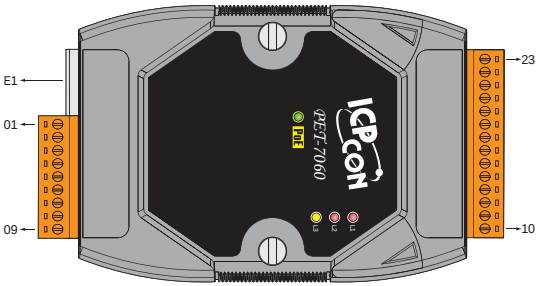
Relay Output		
Output Channels		6
Output Type		Power Relay, Form A (SPST N.O.)
Operating Voltage Range		250 V_{AC}/30 V_{DC}
Max. Load Current		5.0A/channel at 25 °C
Operate Time		6 ms
Release Time		3 ms
Electrical Life (Resistive Load)	VDE	5A 250 V_{AC} 30,000 ops (10 ops/minute) at 75 °C
		5A 30 V_{DC} 70,000 ops (10 ops/minute) at 75 °C
	UL	5A 250 V_{AC}/30 V_{DC} 6,000 ops.
		3A 250 V_{AC}/30 V_{DC} 100,000 ops.
Mechanical Life		20,000,000 ops. at no load (300 ops./minute)
Digital Input		
Input Channels		6
Input Type		Wet Contact (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	4,294,967,285 (32 bits)
	Max. Input Frequency	500 Hz
	Min. Pulse Width	1 ms
Overvoltage Protection		+70 V_{DC}

System Specifications

System		
CPU		80186 CPU (80 MHz)
SRAM		512 KB
Flash Memory		512 KB
EEPROM		16 KB
Dual Watchdog		Yes
Communication		
PoE Ethernet Port		10/100 Base-TX (With link, activity led indicator) and auto MDI/MDI-X connection
2-Way Isolation		
Ethernet		1500 V_{rms}
I/O	DI	3750 V_{rms}
	Relay Output	3000 V_{rms}
LED Indicators		
PoE		PoE On
L1		Run
L2		Link/Act
L3		10/100M
Power Requirements		
IEEE 802.3af		Class 1
Required Supply Voltage		Powered by Power over Ethernet (PoE) or auxiliary power +12 V_{DC} ~ +48 V_{DC} (non-regulated)
LED Indicator		Yes
Power Consumption		0.12 A @ 24 V_{DC} 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
Humidity		5 ~ 90% RH, non-condensing

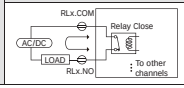
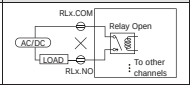
Pin Assignment

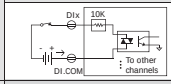
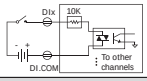
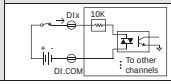
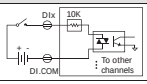
Terminal No.	Pin Assignment
E1	RJ-45
01	IN5
02	IN4
03	IN3
04	IN2
05	IN1
06	IN0
07	IN.COM
08	(R)+Vs
09	(B)GND



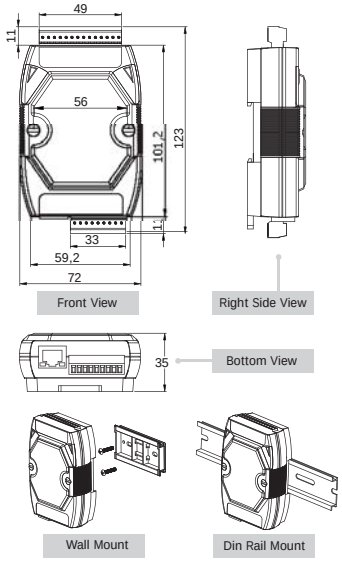
Terminal No.	Pin Assignment
23	RL5 COM
22	RL5 NO
21	RL4 COM
20	RL4 NO
19	RL3 COM
18	RL3 NO
17	RL2 COM
16	RL2 NO
15	RL1 COM
14	RL1 NO
13	RL0 COM
12	RL0 NO
11	N/A
10	N/A

Wire Connection

Digital Output	Readback as 1	Readback as 0
Relay Output	Relay On	Relay Off
		

Digital Input	Readback as 0	Readback as 1
Sink	+10 ~ +50 V_{DC}	OPEN or <4 V_{DC}
		
Source	+10 ~ +50 V_{DC}	OPEN or <4 V_{DC}
		

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 V_{DC} 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)