

# PETL-7060 Ethernet IO Module



## Relay Output & Digital Input

### Feature

- IEEE 802.3af-compliant Power over Ethernet (PoE)
- Built-in web server
- Modbus TCP /UDP protocols
- ESD protection
- Built-in dual watchdog
- 10/100 Base-TX Ethernet
- I/O pair connection
- DO type: 6 power relays (form A)
- DI type: 6 wet contacts (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 PETL-7060 features true IEEE 802.3af-compliant (Class 1) PoE using both Ethernet pairs (Category 5 Ethernet cable).

The PETL-7060 can receive 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

PETL-7060 can be used in a standard Ethernet (non-PoE) system.

The PETL-7060 is an Ethernet I/O module, and features a web server providing configuration, I/O monitoring and control by simply using a web browser. The PETL-7060 offers easily and safely access for users from anytime and anywhere! In addition, the PETL-7060 also supports Modbus TCP /UDP protocols that make perfect integration for PETL-7060 to SCADA software.

The PETL-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 VAC or 5 A @ 30 VDC and each digital input channel supports counter input.

## Application

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

## I/O Specifications

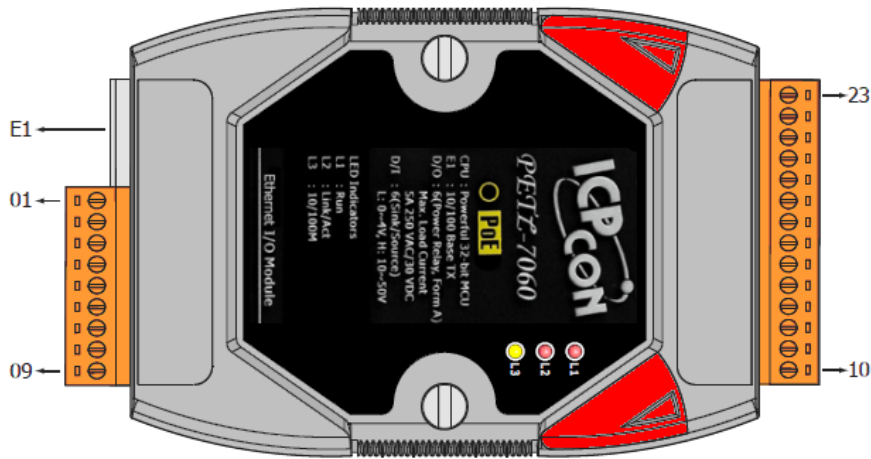
Relay Output		
Output Channels	6	
Output Type	Power Relay, Form A (SPST N.O)	
Operating Voltage	250 VAC/ 30 VDC (Max.)	
MAX Load Current	5.0A/channel at 25°C	
Operate Time	6 ms	
Release Time	3 ms	
Electrical Life (Resistive Load)	VDE	5A 250 Vac 30,000 ops (10 ops/minute) at 75 °C
		5A 30 Vac 70,000 ops (10 ops/minute) at 75 °C
	UL	5A 250 Vac/30 Vdc 6,000 ops
		5A 250 Vac/30 Vdc 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 VDC ~ +50 Vdc	
Off Voltage Level	+4 Vdc Max.	
Input Impedance	10 KOhm	
Counters	Max. Count	4,294,967,285(32 bits)
	Max. Input Frequency	500 Hz
	Min Pulse Width	1 ms
Overvoltage Protection	+70 Vdc	

## System Specifications

System		
CPU	Powerful 32-bit MCU	
SRAM	64 KB	
Flash Memory	256 KB	
Dual Watchdog	Yes	
Communication		
PoE Ethernet Port	10/100 Base-TX, 8-pin RJ-45 x 1, (Auto-negotiating, Auto-MDI/MDIX, LED indicator), PoE (IEEE 802.3af, Class 1)	
Isolation		
I/O	DI	3750 V <sub>rms</sub>
	Relay Output	3000 V <sub>rms</sub>
LED Indicators		
PoE	PoE On	
L1	Run	
L2	Link/Act	
L3	10/100M	
Power Requirements		
Power Input	PoE: IEEE 802.3af, Class 1	
	Terminal block: +12 ~ 48 VDC (non-regulated)	
Power Consumption	0.06A @ 24 Vdc Max	
Mechanical		
Dimensions (W x L x H)	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

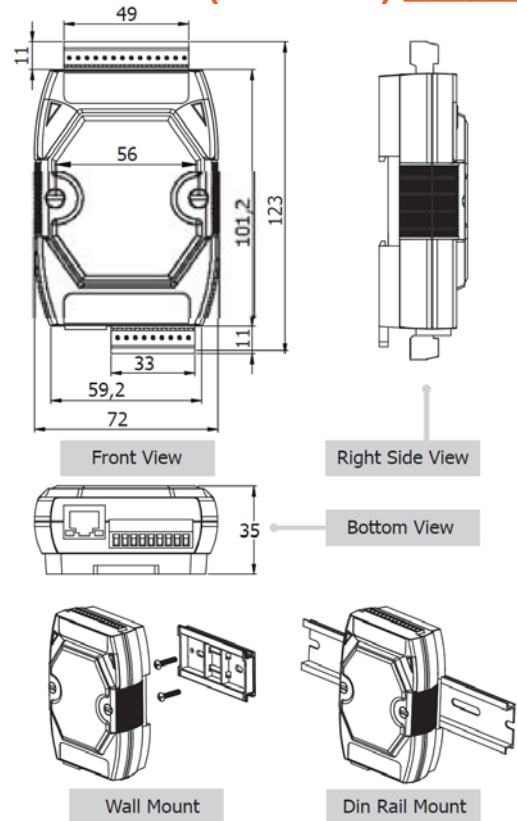


Terminal No.	Pin Assignment
23	RL5 COM
22	RL5 NO
21	RL4 COM
20	RL4 NO
19	RL3 COM
18	RL3 NO
17	RL2 COM
16	RL2 NO
15	RL1 COM
14	RL1 NO
13	RL0 COM
12	RL0 NO
11	N/A
10	N/A

## Wiring

Digital Output	Readback as 1	Readback as 0
Relay Output	Relay On 	Relay Off 
Digital Input	Readback as 1	Readback as 0
Sink	+10 ~ +50 V <sub>DC</sub> 	OPEN or <4 V <sub>DC</sub> 
Source	+10 ~ +50 V <sub>DC</sub> 	OPEN or <4 V <sub>DC</sub> 

## Dimensions (Unit: mm)



## Ordering information

PETL-7060 CR	Ethernet I/O Module with PoE, 6-channel Power Relay D/O and 6-channel Isolated D/I (RoHS).
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## Accessories

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