



## PET-7052

8-channel Isolated Source Type Open Collector Output and  
8-channel Isolated Digital Input Module with PoE

## Digital Input & Digital Output

### 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: 8 Isolation Open Collector (Source Type)
- DI Type: 8 Isolation Wet Contact (Sink, Source Type)



### 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-7052 feature true IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) using both Ethernet pairs (Category 5 Ethernet cable).

The PET-7052 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 PET-7060 can be used in a standard Ethernet (non-PoE) system.

The PET-7052, 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-7052 offers easily and safely access for users from anytime and anywhere! In addition, the PET-7052 also supports Modbus/TCP protocol that makes perfect integration for PET-7052 to SCADA software.

The PET-7052 provides 8 isolated open collector (source type) output and 8 isolated wet contact (sink, source type) digital input channels. Each output channel supports 650 mA current driving @ 10 ~ 40 V<sub>cc</sub> 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.

### System Specifications

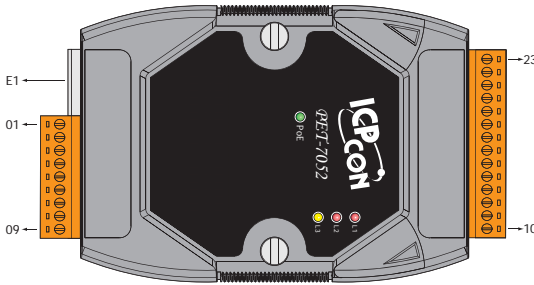
System	
CPU	80186 CPU (80 MHz)
SRAM	512 KB
Flash Memory	512 KB
EEPROM	16 KB
Dual Watchdog	Yes
Communication	
PoE Ethernet Port	10/100 Base-TX (With link, activity led indicator) and auto MDI/MDI-X connection
2-Way Isolation	
Ethernet	1500 V <sub>rms</sub>
I/O	DI 3750 V <sub>rms</sub>
	Relay Output 3000 V <sub>rms</sub>
LED Indicator	
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 <sub>cc</sub> ~ +48 V <sub>cc</sub> (non-regulated)
LED Indicator	Yes
Power Consumption	0.08 A @ 24 V <sub>cc</sub> Max.
Mechanical	
Dimensions	123 mm x 72 mm x 35 mm (W x L x H)
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

### I/O Specifications

Digital Output		
Output Channels	8	
Output Type	Source, Open Collector	
Max. Load Current	650 mA/channel at 25 °C	
Output Voltage	+10 V <sub>cc</sub> ~ +40 V <sub>cc</sub>	
Over-Voltage Protection	+48 V <sub>cc</sub>	
Digital Input		
Input Channels	8	
Input Type	Wet Contact (Sink, Source)	
On Voltage Level	+10 V <sub>cc</sub> ~ +50 V <sub>cc</sub>	
Off Voltage Level	+4 V <sub>cc</sub> Max.	
Input Impedance	10 kΩ	
Counters	Max. Count	4,294,967,285 (32 bits)
	Max. Input Frequency	500 Hz
	Min. Pulse Width	1 ms
	Over-Voltage Protection	+70 V <sub>cc</sub>

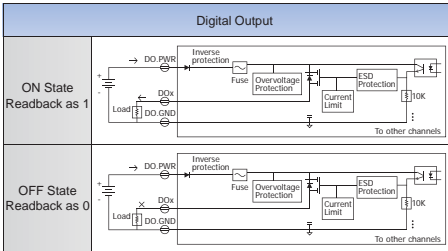
## Pin Assignment

Terminal No.	Pin Assignment
E1	RJ-45
01	IN3
02	IN4
03	IN5
04	IN6
05	IN7
06	IN.COM
07	N/A
08	(R)Vs+
09	(B)GND



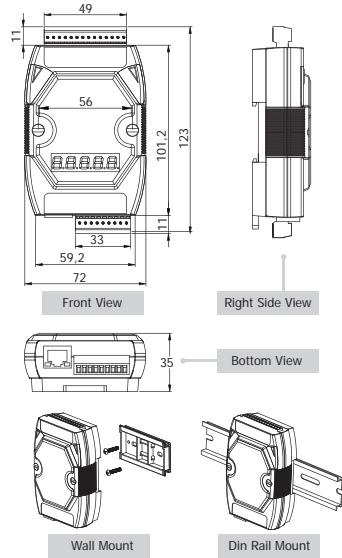
Terminal No.	Pin Assignment
23	IN2
22	IN1
21	IN0
20	IN.COM
19	DO7
18	DO6
17	DO5
16	DO4
15	DO3
14	DO2
13	DO1
12	DO0
11	DO.GND
10	DO.PWR

## Wire Connection



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

## Dimensions (Unit: mm)



## Ordering Information

PET-7052 CR	8-channel Isolated Source Type Open Collector Output and 8-channel Isolated Digital Input Module with PoE (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 Mounting

## Related Products

Converters	USB, RS-232, Fiber Optical to RS-485 Converters and Repeaters	Learning Kit	Starter Learning Kit
Power Supply	24 V <sub>DC</sub> Power Supply	Application Books	Application Books Designed with Our Products
Relay Module	External Relay Modules for PET-7000 DO Module	Data Logger Software	User Friendly Data Logger Software (free)