



**ET-2242**  
**PET-2242**

**ET-2242-32**  
**PET-2242-32**

(PoE) Ethernet I/O Module with 16/32-ch Sink-type DO

## Features

- Built-in Web Server
- Support Modbus TCP/UDP and MQTT Protocols
- 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
- Dual Watchdog
- I/O Pair Connection (Push and Pull)
- Built-in I/O
  - (P)ET-2242: 16-channel Sink-type DO
  - (P)ET-2242-32: 32-channel Sink-type DO
- LED Display to Indicate the I/O Status



## Introduction

The (P)ET-2242/(P)ET-2242-32 provides 16/32 Digital Output channels, each of which features photo couple isolation. The (P)ET-2242/(P)ET-2242-32 supports sink type output with short circuit protection and each channel can drive 650/600 mA load. There are configurable power-on and safe values for digital output. With 2 Ethernet ports, the (P)ET-2242/(P)ET-2242-32 allows daisy chain connection which permits the flexibility in locating devices, eases installation and lowers infrastructure costs. It features 8 kV ESD protection, 4 kV EFT protection, 3 kV surge and 3000 VDC I/O isolation to enrich the noise protection ability for industrial environment.

## System Specifications

Model	ET-2242	PET-2242	ET-2242-32	PET-2242-32
<b>Software</b>				
Built-in Web Server	Yes			
<b>CPU Module</b>				
CPU	32-bit ARM			
Watchdog Timer	Module, Communication (Programmable)			
<b>Isolation</b>				
2-way Isolation	Ethernet: 1500 VDC, I/O: 3000 VDC			
<b>EMS Protection</b>				
EFT (IEC 61000-4-4)	±4 kV for Power Line			
ESD (IEC 61000-4-2)	±8 kV Contact for Each Terminal ±16 kV Air for Random Point			
Surge (IEC 61000-4-5)	±3 kV for Power Line			
<b>LED Indicators</b>				
Status	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE
<b>Ethernet</b>				
Ports	2 x RJ-45, 10/100 Base-Tx, Switch Ports			
PoE	-	Yes	-	Yes
LAN bypass	Yes			
Security	Password and IP Filter			
Protocol	Modbus TCP, Modbus UDP, and MQTT			
<b>Power</b>				
Reverse Polarity Protection	Yes			
Consumption	3.2 W (max.)	3.7 W (max.)	3.7 W (max.)	4.2 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1	-	IEEE 802.3af, Class1
Powered from Terminal Block	+10 to +30 VDC		+10 to +48 VDC	
<b>Mechanical</b>				
Casing	Plastic			
Dimensions (mm)	33 x 126 x 108 (W x L x H)		31 x 157 x 126 (W x L x H)	
Installation	DIN-Rail Mounting			
<b>Environment</b>				
Operating Temperature	-25 to +75°C			
Storage Temperature	-40 to +80°C			
Humidity	10 to 90% RH, Non-condensing			

## I/O Specifications

Model	(P)ET-2242	(P)ET-2242-32
<b>Digital Output</b>		
Channels	16	32
Type	Open Collector	
Sink/Source (NPN/PNP)	Sink	
Load Voltage	+3.5 to +50 VDC	
Load Current	650 mA/channel	600 mA/channel
Overvoltage Protection	+ 60 VDC	
Overload Protection	1.4 A (with short-circuit protection)	
Short Circuit Protection	Yes	
Power-on Value	Programmable	
Safe Value	Programmable	

## Wire Connections

(P)ET-2242		
Output Type	ON State Readback as 1	OFF State Readback as 0
Inductive Load		
Resistance Load		

### (P)ET-2242-32

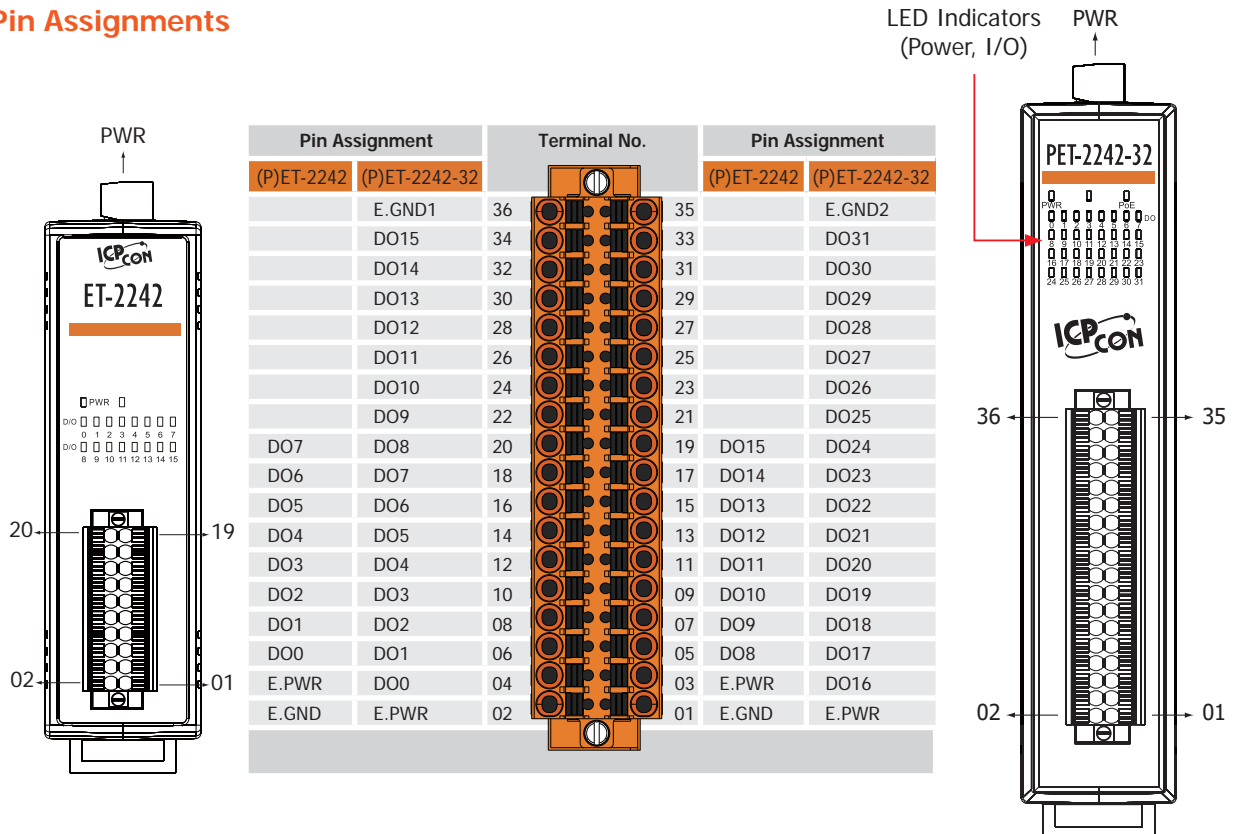
E.GND1: For DO0 - DO15

Output Type	ON State Readback as 1	OFF State Readback as 0
Inductive Load DO0 - DO15		
Resistance Load DO0 - DO15		

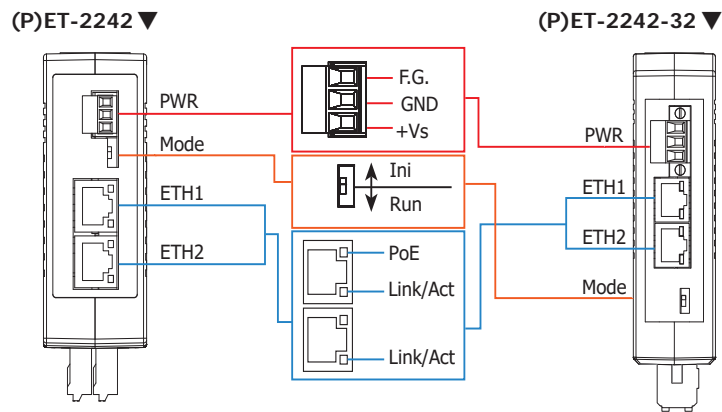
E.GND2: For DO16 - DO31

Output Type	ON State Readback as 1	OFF State Readback as 0
Inductive Load DO16 - DO31		
Resistance Load DO16 - DO31		

## Pin Assignments

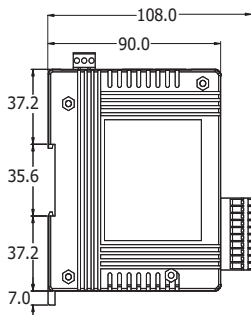


## Appearance

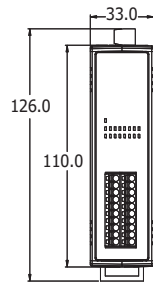


## Dimensions (Units: mm)

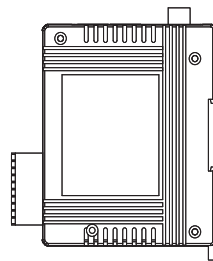
(P)ET-2242



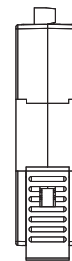
Left Side View



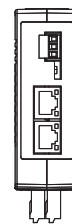
Front View



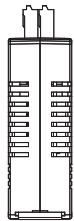
Right Side View



Rear View

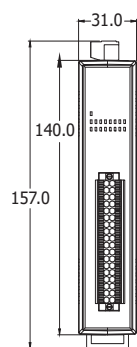
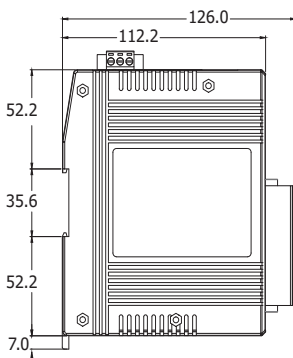


Top View



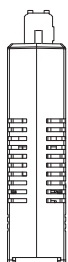
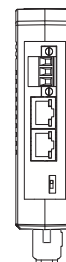
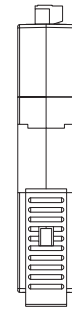
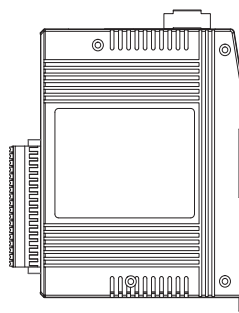
Bottom View

(P)ET-2242-32



140.0

157.0



## Ordering Information

ET-2242 CR	Ethernet I/O Module with 2-port Ethernet Switch and 16-ch Sink-type DO (RoHS)
PET-2242 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch and 16-ch Sink-type DO (RoHS)
ET-2242-32 CR	Ethernet I/O Module with 2-port Ethernet Switch and 32-ch Sink-type DO (RoHS)
PET-2242-32 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch and 32-ch Sink-type DO (RoHS)