



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
Software				
Built-in Web Server	Yes			
CPU Module				
CPU	32-bit ARM			
Watchdog Timer	Module, Communication (Programmable)			
Isolation				
2-way Isolation	Ethernet: 1500 VDC, I/O: 3000 VDC			
EMS Protection				
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			
LED Indicators				
Status	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE
Ethernet				
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			
Power				
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		
Mechanical				
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			
Environment				
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
Digital Output		
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

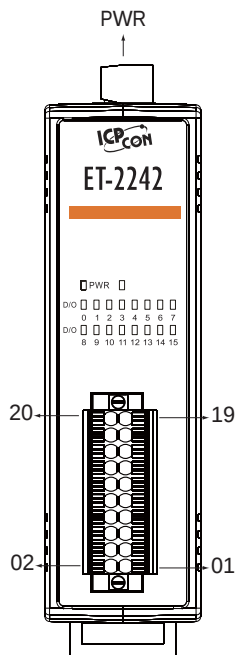
E.GND1: For DO0 - DO15

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

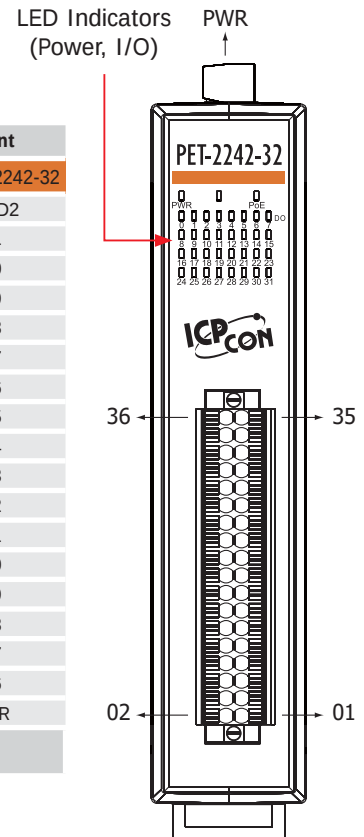
E.GND2: For DO16 - DO31

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

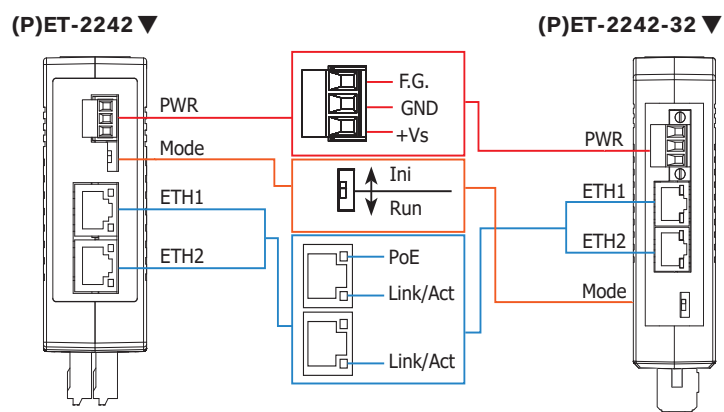
Pin Assignments



Pin Assignment		Terminal No.	Pin Assignment	
(P)ET-2242	(P)ET-2242-32		(P)ET-2242	(P)ET-2242-32
	E.GND1	36		E.GND2
	DO15	34		DO31
	DO14	32		DO30
	DO13	30		DO29
	DO12	28		DO28
	DO11	26		DO27
	DO10	24		DO26
	DO9	22		DO25
DO7	DO8	20	DO15	DO24
DO6	DO7	18	DO14	DO23
DO5	DO6	16	DO13	DO22
DO4	DO5	14	DO12	DO21
DO3	DO4	12	DO11	DO20
DO2	DO3	10	DO10	DO19
DO1	DO2	08	DO9	DO18
DO0	DO1	06	DO8	DO17
E.PWR	DO0	04	E.PWR	DO16
E.GND	E.PWR	02	E.GND	E.PWR

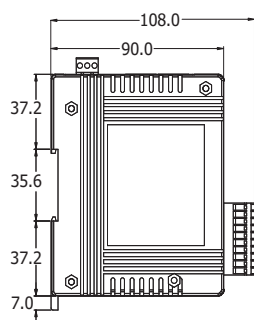


Appearance

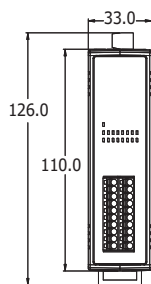


Dimensions (Units: mm)

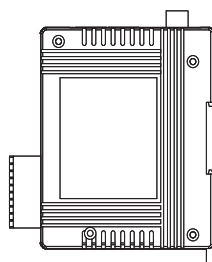
(P)ET-2242



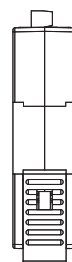
Left Side View



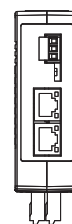
Front View



Right Side View



Rear View

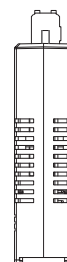
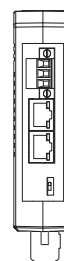
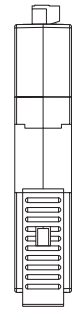
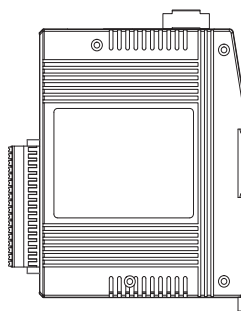
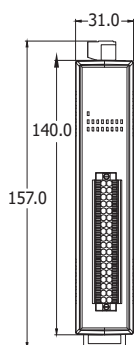
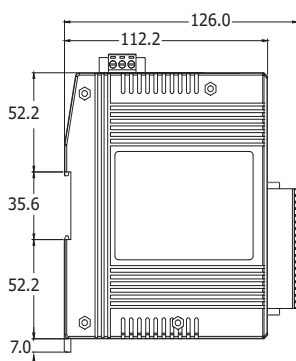


Top View



Bottom View

(P)ET-2242-32



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)