



**ET-2242U**

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

Ethernet I/O Module with 16/32-ch DO

## Features

- Web Server for Configuration
- Support Modbus TCP/UDP, MQTT, and SNMP V2c Protocols
- 2-port Ethernet Switch (LAN Bypass) for Daisy-chain Wiring
- Supports Dual-watchdog
- I/O Pair Connection (Push and Pull)
- Built-in I/O
  - ET-2242U: 16-ch DO (Sink/Source)
  - (P)ET-2242U-32: 32-ch DO (Sink/Source)
- LED Display to Indicate the I/O Status



## Introduction

**ET-2242U/(P)ET-2242U-32** is a 16 or 32-channel digital output (Sink-type or Source-type) module, selectable via wiring, and each channel can drive a 500 mA/300 mA load. The module includes a built-in 2-port Ethernet switch, facilitating a daisy-chain topology. This feature offers flexibility in device configuration, simplifies installation, and reduces infrastructure costs. Additionally, the module provides EMS (EFT/ESD/Surge) protection and 3000 VDC I/O isolation to enhance noise protection capabilities in industrial environments. It also offers configurable DO power-on value and safe value settings.

## System Specifications

Model	ET-2242U	ET-2242U-32	PET-2242U-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		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	±4 kV Contact for Each Terminal, ±8 kV Air for Random Point	
Surge (IEC 61000-4-5)	±2 kV for Power Line		
<b>LED Indicators</b>			
Status	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
LAN bypass	Yes		
Access Control	Password and IP Filter		
Protocol	Modbus TCP, Modbus UDP, MQTT, SNMP V2c		
<b>Power</b>			
Reverse Polarity Protection	Yes		
Consumption	2.6 W (max.)	2.4 W (max.)	2.6 W (max.)
Powered from PoE	-		IEEE 802.3af, Class1
Powered from Terminal Block	+10 ~ +48 VDC		
<b>Mechanical</b>			
Casing	Plastic		
Dimensions (mm)	33 x 126 x 108 (W x L x H)	31 x 157 x 129 (W x L x H)	
Installation	DIN-Rail Mounting		
<b>Environment</b>			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +80 °C		
Humidity	10 ~ 90% RH, Non-condensing		

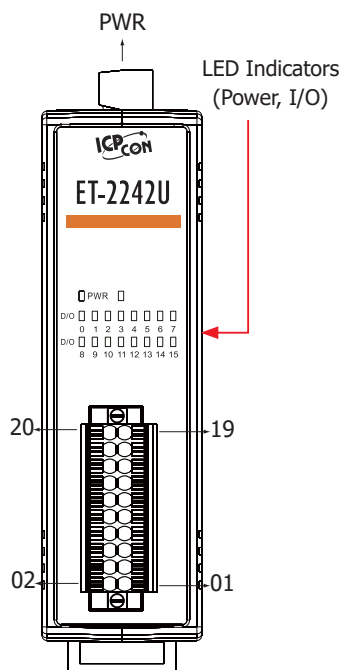
## I/O Specifications

Model	ET-2242U	ET-2242U-32 PET-2242U-32
<b>Digital Output</b>		
Channels	16	32
Type	Push-Pull	
Sink/Source (NPN/PNP)	Sink/Source	
Load Voltage	+3.5 ~ +80 V	
Load Current	500 mA/channel	300 mA/channel
Power-on Value	Programmable	
Safe Value	Programmable	

## Wire Connections

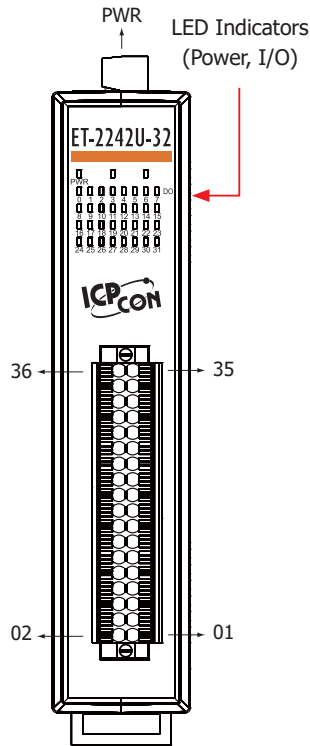
Output Type	ON State Readback as 1	OFF State Readback as 0
Sink		
Source		

## Pin Assignments

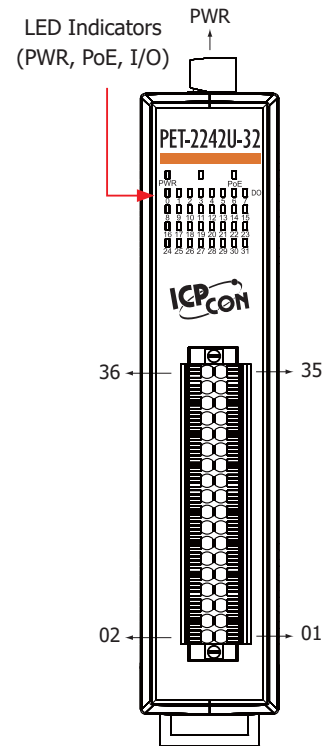


ET-2242U			
Pin Assignment	Terminal No.		Pin Assignment
DO7	20	19	DO15
DO6	18	17	DO14
DO5	16	15	DO13
DO4	14	13	DO12
DO3	12	11	DO11
DO2	10	09	DO10
DO1	08	07	DO9
DO0	06	05	DO8
DO.COM	04	03	DO.COM
DO.COM	02	01	DO.COM

## Pin Assignments

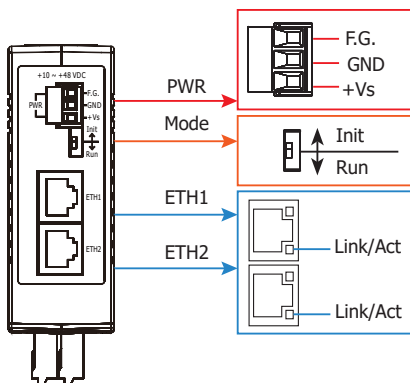


ET-2242U-32/PET-2242U-32				
Pin Assignment	Terminal No.	Terminal No.	Terminal No.	Pin Assignment
DO0	36	35	34	DO16
DO1	34	33	32	DO17
DO2	32	31	30	DO18
DO3	30	29	28	DO19
DO4	28	27	26	DO20
DO5	26	25	24	DO21
DO6	24	23	22	DO22
DO7	22	21	20	DO23
DO8	20	19	18	DO24
DO9	18	17	16	DO25
DO10	16	15	14	DO26
DO11	14	13	12	DO27
DO12	12	11	10	DO28
DO13	10	9	8	DO29
DO14	8	7	6	DO30
DO15	6	5	4	DO31
DO.COM	4	3	2	DO.COM1
DO.COM	2	1	0	DO.COM1

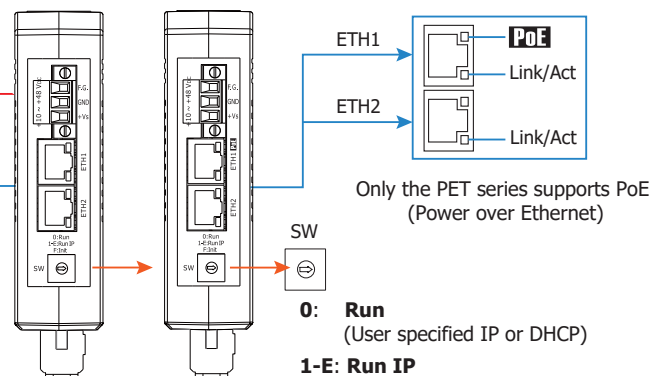


## Appearance

### ▼ ET-2242U



### ▼ ET-2242U-32/PET-2242U-32

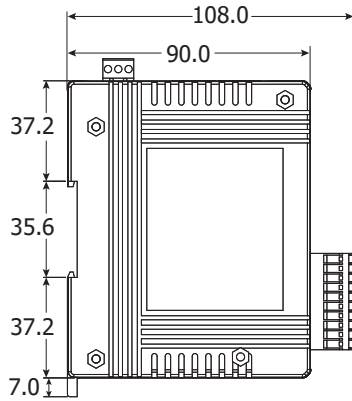


Only the PET series supports PoE (Power over Ethernet)

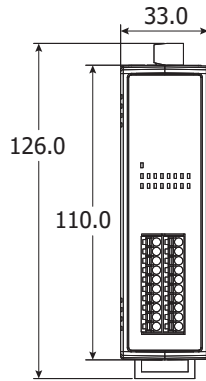
- 0:** Run (User specified IP or DHCP)
- 1-E:** Run IP (Default IP, 192.168.255.1 - 14)
- F:** Init (Factory default, Firmware Update)

## ■ Dimensions (Units: mm)

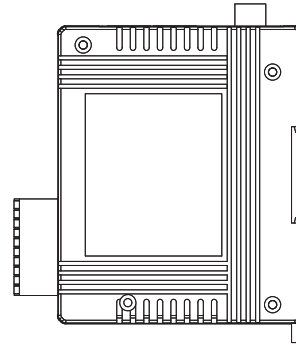
ET-2242U



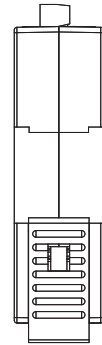
Left Side View



Front View

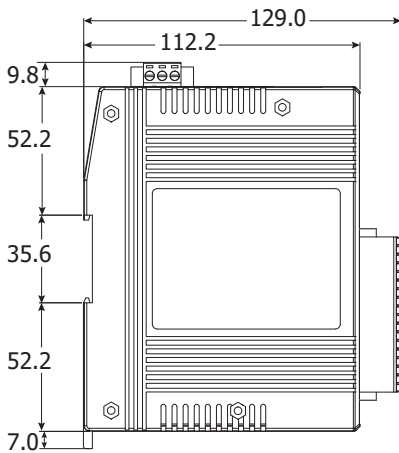


Right Side View

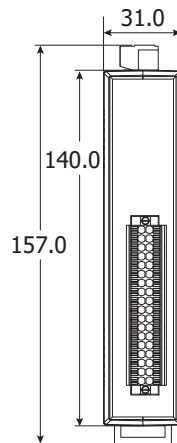


Rear View

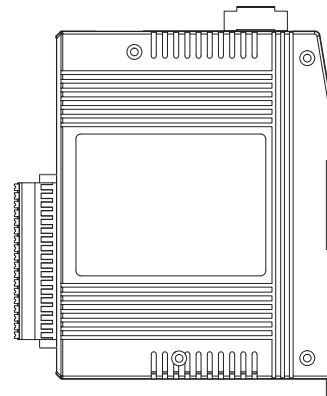
ET-2242U-32/PET-2242U-32



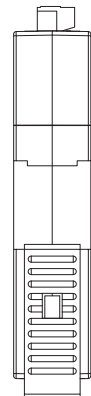
Left Side View



Front View



Right Side View



Rear View

## ■ Ordering Information

<b>ET-2242U CR</b>	Ethernet I/O Module with 2-port Ethernet Switch, 16-ch DO (Sink/Source) (RoHS)
<b>ET-2242U-32 CR</b>	Ethernet I/O Module with 2-port Ethernet Switch, 32-ch DO (Sink/Source) (RoHS)
<b>PET-2242U-32 CR</b>	PoE I/O Module with 2-port Ethernet Switch, 32-ch DO (Sink/Source) (RoHS)