



## ET-2242

Ethernet I/O Module with 16-ch Open Collector DO

### Features

- Built-in Web Server
- Support Modbus TCP/UDP Protocols
- Powerful 32-bit MCU Handles Efficient Network Traffic
- 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
- Dual Watchdog
- I/O Pair Connection (Push and Polling)
- Easy Firmware Update via Ethernet
- LED Display to Indicate the I/O status
- 16 Open Collector Digital Output channels
- Wide Operating Temperature Range: -25 ~ +75°C



### Introduction

The ET-2242 provides 16 Digital Output channels, each of which features photo couple isolation. The ET-2242 supports sink type output with short circuit protection and each channel can drive 650 mA load. There are configurable power-on and safe values for digital output. With 2 Ethernet ports, the ET-2242 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 V<sub>DC</sub> I/O isolation are also provided to enrich the noise protection ability for industrial environment.

### System Specifications

System	
CPU	32-bit ARM
Communication	
Ethernet Port	2 x RJ-45, 10/100 Base-TX, Switch Ports
Protocol	Modbus TCP, Modbus UDP
Security	Password and IP Filter
I/O Pair Connection	Yes (Push, Polling)
Dual Watchdog	Yes, Module, Communication (Programmable)
LAN Bypass	Yes
LED Indicators	
for System Running	Yes
for Ethernet Link/Act	Yes
for DI/DO status	Yes
2-Way Isolation	
Ethernet	1500 V <sub>DC</sub>
I/O	3000 V <sub>DC</sub>
EMS Protection	
ESD (IEC 61000-4-2)	±8 kV Contact for Each Terminal and ±16 kV Air for Random Point
EFT (IEC 61000-4-4)	±4 kV for Power Line
Surge (IEC 61000-4-5)	±3 kV for Power Line
Power	
Reverse Polarity Protection	Yes
Powered from Terminal Block	+10 ~ +30 V <sub>DC</sub>
Consumption	3.2 W (Max.)
Mechanical	
Dimensions (L x W x H)	127 mm x 33 mm x 99 mm
Installation	DIN-Rail Mounting
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 ~ 90% RH, Non-condensing

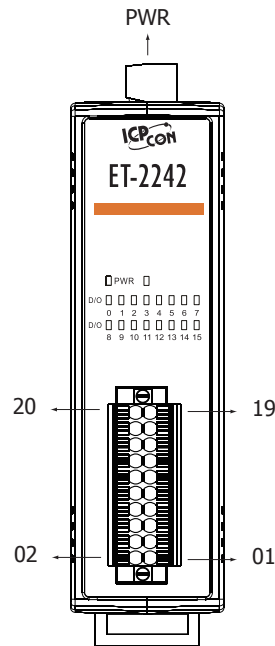
### I/O Specifications

Digital Output	
Channels	16
Type	Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+3.5 V ~ +50 V PASS
Max. Load Current	650 mA/Channel PASS
Overload Protection	1.4 A (with short-circuit protection)
Overvoltage Protection	+ 60 VDC

### Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance Load		

### Pin Assignments



Terminal No.	Pin Assignment
PWR	F.G. GND + Vs
ETH1	
ETH2	

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

### Ordering Information

<b>ET-2242 CR</b>	Ethernet I/O Module with 2-port Ethernet Switch, 16-ch Open Collector Digital Output (RoHS)
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### Related Products

NS-205 CR	Unmanaged 5-Port Industrial Ethernet Switch with Power Input +10 ~ +30 Vdc (RoHS)
NS-208 CR	Unmanaged 8-port Industrial 10/100 Base-TX Ethernet Switch with Power Input +10 ~ +30 VDC (RoHS)
DIN-KA52F CR	24 V/1.04 A, 25 W Power Supply with DIN-Rail Mounting (RoHS)
GPSU06U-6	24 V/0.25 A (max.) Power Supply