



## ET-2260

Ethernet I/O Module with 6-ch DI and 6-ch Power Relay

### 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
  - DI/Counter: 6 channels
  - Power Relay: 6 channels
- LED Display to Indicate the I/O Status



### Introduction

The ET-2260 provides 6 wet contact Digital Input channels and 6 Form A electromechanical Relays. With 2 Ethernet ports, the ET-2260 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 enhance noise protection capabilities in industrial environments. Each input channel can be used as a 32-bit counter. The power-on value and safe value of relay are configurable.

### System Specifications

<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
<b>Ethernet</b>	
Ports	2 x RJ-45, 10/100 Base-Tx, Switch Ports
LAN bypass	Yes
Security	Password and IP Filter
Protocol	Modbus TCP, Modbus UDP, and MQTT
<b>Power</b>	
Reverse Polarity Protection	Yes
Consumption	3.3 W (max.)
Powered from Terminal Block	+10 to +30 VDC
<b>Mechanical</b>	
Casing	Plastic
Dimensions (mm)	33 x 127 x 99 (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

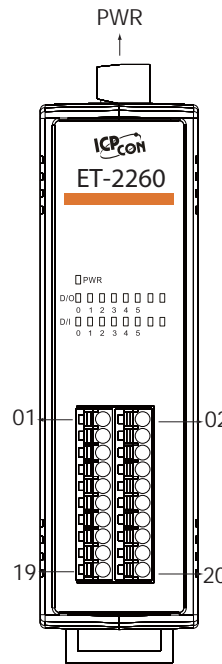
Digital Input/Counter	
Channels	6
Type	Dry Contact Wet Contact
Sink/Source (NPN/PNP)	Dry: Source Wet: Sink/Source
ON Voltage Level	Dry: Close to GND Wet: +10 to +50 VDC
OFF Voltage Level	Dry: Open Wet: +4 VDC (max.)
Max. Counts	4,294,967,295 (32-bit)
Frequency	3 kHz
Input Impedance	7.5 kΩ
Overshoot Protection	+70 VDC
Low Pass Filter	1 to 6500 ms (0.08 Hz to 500 Hz)
Power Relay	
Channels	6
Type	Power Relay, Form A (SPST N.O.)
Contact Rating	5 A @ 250 VAC/24 VDC (Resistive Load)
Operate Time	10 ms (max.)
Release Time	5 ms (max.)
Min. Contact Load	10 mA @ 5 V
Electrical Endurance	10 <sup>5</sup> ops.
Mechanical Endurance	2 × 10 <sup>7</sup> ops.
Power-on Value	Programmable
Safe Value	Programmable

## Wire Connections

Digital Input /Counter	Readback as 1	Readback as 0
Dry Contact	Close to GND 	Open 
	+10 to +50 VDC 	OPEN or <4 VDC 
Wet Contact (Sink)		
Wet Contact (Source)	+10 to +50 VDC 	OPEN or <4 VDC 

Power Relay	ON State Readback as 1
Relay Output	
	OFF State Readback as 0

## Pin Assignments



Port	Pin Assignment
PWR	F.G. GND + Vs
ETH1	
ETH2	

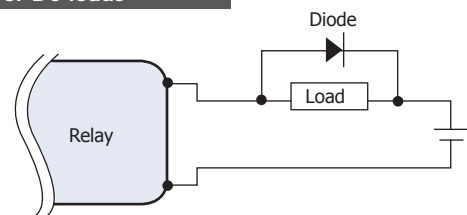
Pin Assignment	Terminal No.	Pin Assignment
NO0	01	02 GND
COM0	03	04 DI0
NO1	05	06 DI1
COM1	07	08 DI2
NO2	09	10 DI3
COM2	11	12 DI4
NO3	13	14 DI5
COM3	15	16 DICOM
NO4	17	18 NO5
COM4	19	20 COM5

20-pin Connector

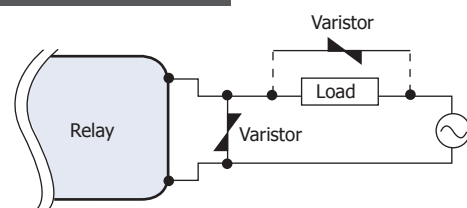
### Note:

When inductive loads are connected to the relays, a large counter electromotive force may occur when the relay actuates because of the energy stored in the load. These flyback voltages can severely damage the relay contacts and greatly shorten the relay life. Limit these flyback voltages at your inductive load by installing a flyback diode for DC loads or a metal oxide varistor for AC loads.

### for DC loads



### for AC loads



## Ordering Information

ET-2260 CR

Ethernet I/O Module with 2-port Ethernet Switch, 6-ch Relay Output and 6-ch DI (RoHS)