Slim Type Ethernet I/O Modules





ET-2268

Ethernet I/O Module with 4-ch Form A and 4-ch Form C Signal Relay Output

■ 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 ■ Wide Operating Temperature Range: -25 ~ +75°C



■ Built-in I/O





□ 4 Form A Signal Relay Output Channels □ 4 Form C Signal Relay Output Channels



■ Introduction

The ET-2268 provides 4 Form A signal Relay output and 4 Form C signal Relay Output channels. With 2 Ethernet ports, The ET-2268 allows daisy chain connection which permits the flexibility in locating devices, eases installation and lowers infrastructure costs. This module include 8 LED indicators that can be used to monitor the Relay Output status, and options are provided that allow power-on and safe Digital Output values to be configured. It features 8 kV ESD, 4 kV EFT and 3 kV surge protection to enhance noise protection capabilities in industrial environments. The ET-2268 is the ideal solution for small signal switching.

■ System Specifications

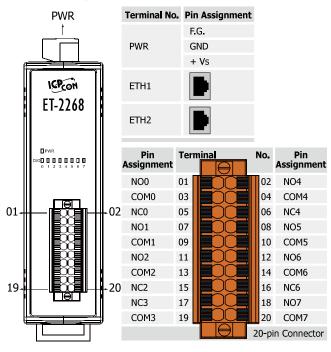
| System | System | | | | |
|-----------------------------|---|--|--|--|--|
| CPU | 32-bit ARM | | | | |
| Communication | <u> </u> | | | | |
| Ethernet Port | 2 x RJ-45, 10/100 Base-TX, Switch Ports | | | | |
| Protocol | Modbus TCP, Modbus UDP | | | | |
| Security | Password and IP Filter | | | | |
| I/O Pair Connection | Yes (Push, Polling) | | | | |
| Dual Watchdog | Yes, Module, Communication (Configurable) | | | | |
| LAN Bypass | Yes | | | | |
| LED Indicators | ** | | | | |
| System Running | Yes | | | | |
| Ethernet Link/Act | Yes | | | | |
| DI/DO status | Yes | | | | |
| 2-Way Isolation | | | | | |
| Ethernet | 1500 VDC | | | | |
| I/O | 3000 VDC | | | | |
| 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 VDC | | | | |
| Consumption | 2.9 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 | | | | |

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■ I/O Specifications

| Relay Output | | | | |
|----------------|----------------------|--|--|--|
| Channels | | 8 (Form A x 4, Form C x 4) | | |
| Relay Type | | Signal Relay | | |
| | Contact Rating | 2 A @ 30 VDC 0.24 A @ 220 VDC 0.25 A @ 250 VAC | | |
| | Min. Contact Load | 10 mA @ 20 mV | | |
| Form A | Contact Material | Siler Nickel, Gold-covered | | |
| | Operate Time | 3 ms (Typical) | | |
| | Release Time | 4 ms (Typical) | | |
| | Mechanical Endurance | 10 ⁸ ops | | |
| | Electrical Endurance | 2×10^5 ops | | |
| Form C | Contact Rating | 2 A @ 30 VDC 0.24 A @ 220 VDC 0.25 A @ 250 VAC | | |
| | Min. Contact Load | 10 mA @ 20 mV | | |
| | Contact Material | Siler Nickel, Gold-covered | | |
| | Operate Time | 3 ms (Typical) | | |
| | Release Time | 4 ms (Typical) | | |
| | Mechanical Endurance | 10 ⁸ ops | | |
| | Electrical Endurance | 2 x 10 ⁵ ops | | |
| Surge Strength | | 2000 VDC | | |
| Power-on Value | | Yes, Configurable | | |
| Safe Value | | Yes, Configurable | | |

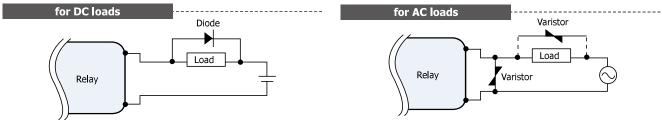
■ Pin Assignments



■ Wire Connections

| Relay Output | ON State Readback as 1 | OFF State Readback as 0 |
|---------------------------------------|---------------------------|----------------------------|
| Form A Relay in NO1, NO3, NO4, NO7 | AC/DC Load ON NOX COMX | AC/DC × Nox COMx |
| Form C Relay in NO0, NO2, NO4, NO6 | X Load1 □ | AC/DC NCx COMx NOx |

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.



Ordering Information

ET-2268 CR Ethernet I/O Module with 2-port Ethernet Switch, 4-ch Form A Relay Output and 4-ch Form C Relay Output (RoHS)

■ 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 |

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