

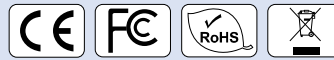


ET-2251

Ethernet I/O Module with 16-ch Wet/Dry Contact DI

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 Wet Contact & Dry Contact Digital Input Channels
- Wide Operating Temperature Range: -25 ~ +75°C



Introduction

The ET-2251 provides 16 wet contact and dry contact Digital Input channels. With 2 Ethernet ports, the ET-2251 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_{DC} I/O isolation to enhance noise protection capabilities in industrial environments. Each input channel can be used as a 32-bit counter.

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 (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

I/O Specifications

Digital Input/Counter		
Channels	16	
Type	Wet Contact/Dry Contact	
Sink/Source (NPN/PNP)	Sink/Source	
On Voltage Level	+5 VDC ~ +50 VDC	
Off Voltage Level	+1 VDC Max.	
Input Impedance	7.5 kΩ	
Counters	Max. Count	4,294,967,295 (32 bits)
	Max. Input Frequency	3 kHz
	Programmable Digital Filter	1 ~ 6500 ms (0.08 Hz ~ 500 Hz)
Overvoltage Protection	+ 70 VDC	

Wire Connections

Digital Input/Counter	Readback as 1	Readback as 0
	Close to GND	Open
Dry Contact		
	+5 ~ +50 VDC	OPEN or <1 VDC
Wet Contact (Sink)		
	+5 ~ +50 VDC	OPEN or <1 VDC
Wet Contact (Source)		

Ordering Information

ET-2251 CR	Ethernet I/O Module with 2-port Ethernet Switch, 16-ch Wet Contact and Dry Contact Digital Input (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

Pin Assignments

