



ET-2254

Ethernet I/O Module with 16-ch Universal DIO

ET-2254P

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 channels of Universal DIO
- Provide Digital Output Maximum Load Current:
 - ET-2254: 100 mA/Channel
 - ET-2254P: 400 mA/Channel
- Bi-direction Universal DIO ports under software control
- Wide Operating Temperature Range: -25 ~ +75°C



Introduction

The ET-2254(P) provides 16-channel Universal DIO. Each I/O port can be configured as a DI or DO port. The ET-2254 provides Digital Output channel can drive 100 mA load, while the ET-2254P provides Digital Output channel can drive 400 mA load. There are configurable power-on and safe values for Digital Output. With 2 Ethernet ports, the ET-2254(P) allows daisy chain connection which permits the flexibility in locating devices, eases installation and lowers infrastructure costs. These modules feature 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.

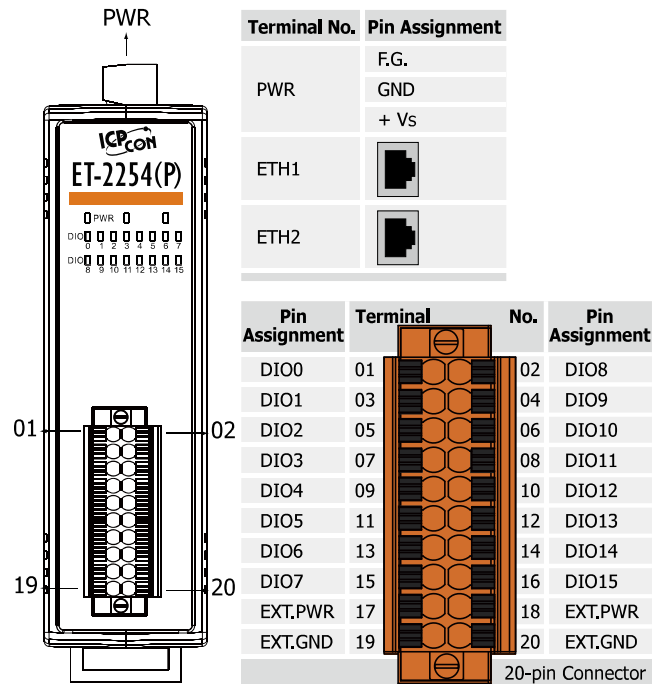
System Specifications

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	3.3 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

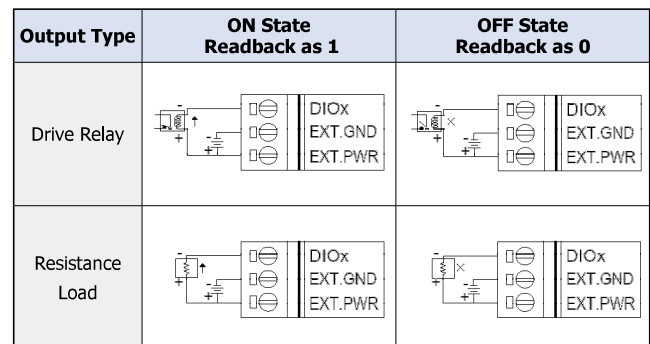
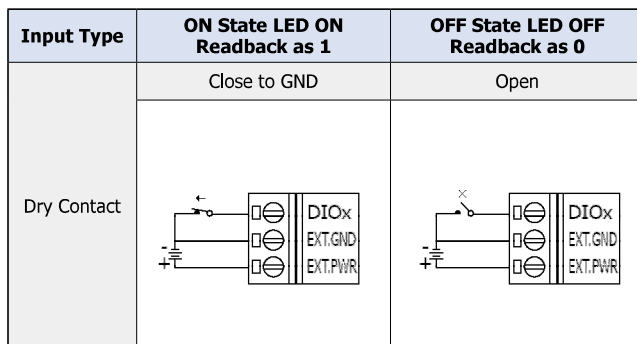
I/O Specifications

Model	ET-2254	ET-2254P
Parallel I/O Module		
I/O Type	By Wire Connection	
I/O Channels	16	
Digital Input		
Type	Dry Contact	
Sink/Source (NPN/PNP)	Source	
On Voltage Level	Close to GND	
Off Voltage Level	Open	
Input Impedance	3 kΩ, 0.5 W	7.5 kΩ, 1 W
Counters	Max. Count	4,294,967,295 (32 bits)
	Max. Input Frequency	3 kHz 2.5 kHz
	Programmable Digital Filter	1 ~ 6500 ms (0.08 Hz ~ 500 Hz)
Digital Output		
Type	Open-collector (Sink)	
Max. Load Current	100 mA/channel	400 mA/channel
Load Voltage	+5 VDC to +30 VDC	+5 VDC to +50 VDC
Short Circuit Protection	-	Yes
Power-on Value	Yes, Configurable	
Safe Value	Yes, Configurable	

Pin Assignments



Wire Connections



Ordering Information

ET-2254 CR	Ethernet I/O Module with 2-port Ethernet Switch, 16-ch Universal DIO (DO Max. Load Current: 100 mA) (RoHS)
ET-2254P CR	Ethernet I/O Module with 2-port Ethernet Switch, 16-ch Universal DIO (DO Max. Load Current: 400 mA) (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