



ET-2254

Ethernet I/O Module with 16-ch Universal DIO

ET-2254P

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)
- 16-channel programmable Universal DIO
- Provide Digital Output Maximum Load Current
 - ET-2254: 100 mA/channel
 - ET-2254P: 350 mA/channel
- LED Display to Indicate the I/O Status



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

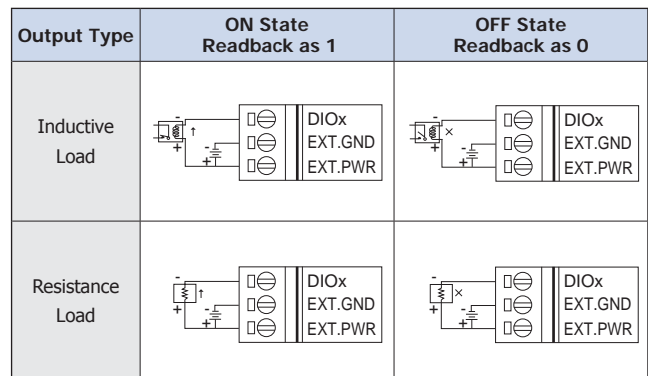
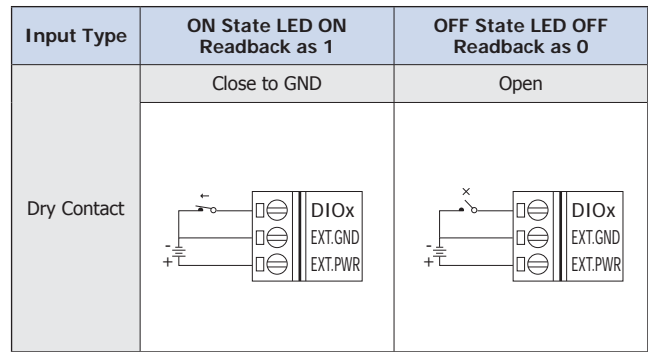
Model	ET-2254	ET-2254P
Software		
Built-in Web Server	Yes	
CPU Module		
CPU	32-bit ARM	
Watchdog Timer	Module, Communication (Programmable)	
Isolation		
2-way Isolation	Ethernet: 1500 VDC I/O: 3000 VDC	
EMS Protection		
EFT (IEC 61000-4-4)	±4 kV for Power Line	
ESD (IEC 61000-4-2)	±8 kV Contact for Each Terminal ±16 kV Air for Random Point	
Surge (IEC 61000-4-5)	±3 kV for Power Line	
LED Indicators		
Status	Run, Ethernet, I/O	
Ethernet		
Ports	2 x RJ-45, 10/100 Base-Tx, Switch Ports	

Model	ET-2254	ET-2254P
LAN bypass	Yes	
Security	Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP, and MQTT	
Power		
Reverse Polarity Protection	Yes	
Consumption	3.3 W (max.)	
Powered from Terminal Block	+10 to +30 VDC	
Mechanical		
Casing	Plastic	
Dimensions (mm)	33 x 126 x 108 (W x L x H)	
Installation	DIN-Rail Mounting	
Environment		
Operating Temperature	-25 to +75°C	
Storage Temperature	-40 to +80°C	
Humidity	10 to 90% RH, Non-condensing	

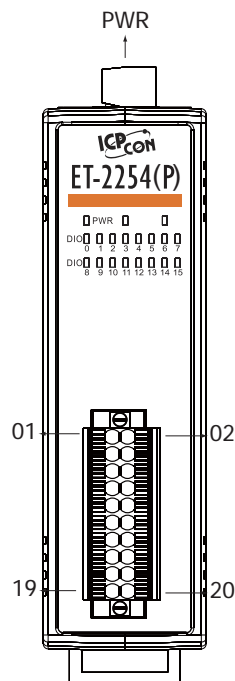
I/O Specifications



Model	ET-2254	ET-2254P
Parallel I/O Module		
DI/DO	By Wire Connection	
I/O Channels	16	
Digital Input/Counter		
Type	Dry Contact	
Sink/Source (NPN/PNP)	Source	
ON Voltage Level	Close to GND	
OFF Voltage Level	Open	
Max. Counts	4,294,967,295 (32-bit)	
Frequency	3 kHz	2.5 kHz
Input Impedance	3 k Ω	7.5 k Ω
Low Pass Filter	1 to 6500 ms (0.08 Hz to 500 Hz)	
Digital Output		
Type	Open-collector	
Sink/Source (NPN/PNP)	Sink	
Load Voltage	+5 to +30 VDC	+5 to +50 VDC
Load Current	100 mA/channel	350 mA/channel
Short Circuit Protection	-	Yes
Power-on Value	Programmable	
Safe Value	Programmable	

Wire Connections



Pin Assignments



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

Pin Assignment	Terminal No.	Pin Assignment
DIO0	01	02 DIO8
DIO1	03	04 DIO9
DIO2	05	06 DIO10
DIO3	07	08 DIO11
DIO4	09	10 DIO12
DIO5	11	12 DIO13
DIO6	13	14 DIO14
DIO7	15	16 DIO15
EXT.PWR	17	18 EXT.PWR
EXT.GND	19	20 EXT.GND

20-pin Connector

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: 350 mA) (RoHS)