

ET-7083
PET-7083

Ethernet I/O Module with 3-ch Encoder/Counter Input

Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Access Control
- Dual Watchdog
- Built-in I/O
  - 3-axis 32-bit Encoder/Counter Input
  - 1 MHz max. for Quadrant Mode
  - 4 MHz max. for CW/CCW, Pulse/Direction Mode
  - Counter Value Retention

Introduction

The ET-7083/PET-7083 is a 3-axis high speed encoder/counter module. Its each axis can be individually configured for Quadrant, Pulse/Direction or CW/CCW counting modes. The maximum input rate for Quadrant counting mode is 1 MHz, and for Pulse/Direction, CW/CCW counting modes is 4 MHz. The encoder/counter module is equipped a FRAM to retain the counter value after it is powered off. FRAM is a nonvolatile memory that can hold written data even after it is powered off. The data retention can be 10 years. And the feature can be configured as enabled or disabled.

System Specifications

Model	ET-7083	PET-7083
Software		
Built-in Web Server	Yes	
CPU Module		
Watchdog Timer	Module, Communication (Programmable)	
2-Way Isolation		
Ethernet	1500 VDC	-
I/O	2500 VDC	
EMS Protection		
EFT (IEC 61000-4-4)	±4 kV for Power Line	
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal ±8 kV Air for Random Point	
LED Indicators		
Status	Run, Ethernet	Run, Ethernet, PoE
Ethernet		
Ports	1 x RJ-45, 10/100 Base-TX	
PoE	-	Yes
Access Control	ID, Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP	
Power		
Reverse Polarity Protection	Yes	
Consumption	2.7 W (max.)	2.7 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1
Powered from Terminal Block	+10 ~ +30 VDC	+12 ~ +48 VDC
Mechanical		
Dimensions (mm)	72 x 123 x 35 (W x L x H)	
Installation	DIN-Rail Mounting	

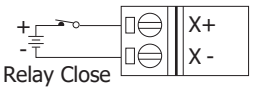
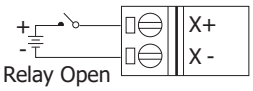
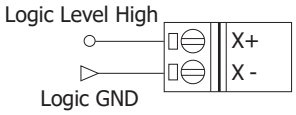
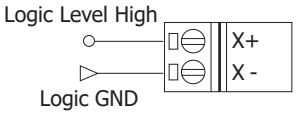
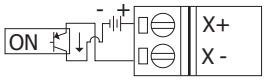
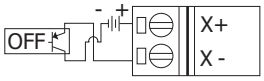
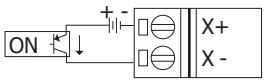
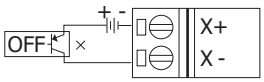
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Environment	
Operating Temperature	-25 ~ +75℃
Storage Temperature	-30 ~ +80℃
Humidity	10 ~ 90% RH, Non-condensing

I/O Specifications

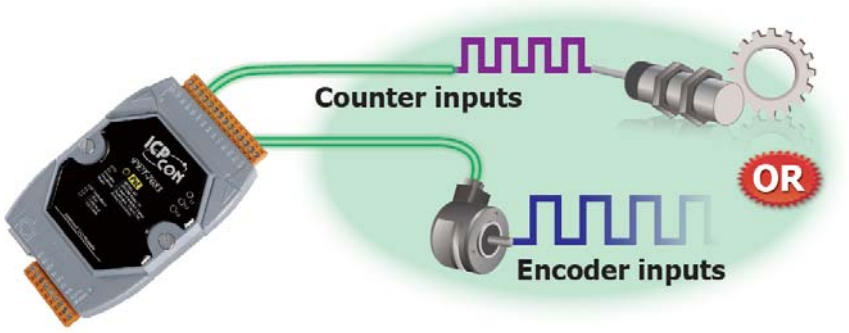
Model	ET-7083	PET-7083
Counter/Frequency/Encoder Input		
Channels	3-axis	
Counter Mode	Quadrant	
	CW/CCW	
	Pulse/Direction	
Bits	32-bit	
ON Voltage Level	5 V: +3.5 ~ +5 VDC	
	12 V with 1 kΩ External Resistor: +5 ~ +12 VDC	
	24 V with 2 kΩ External Resistor: +7 ~ +24 VDC	
OFF Voltage Level	+2 VDC (max.)	
Individual Channel Configuration	Yes	
Max. Speed	Quadrant mode: 1 MHz	
	CW/CCW mode: 4 MHz	
	Pulse/Direction mode: 4 MHz	
Counter Value Retention	Yes	
Counter Preset Value	Programmable	

Wire Connections

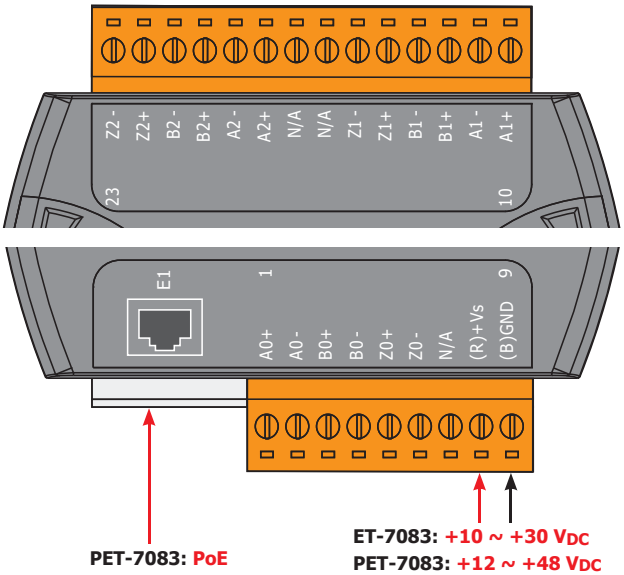
Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Relay Contact	Relay ON	Relay OFF
		
TTL/CMOS Logic	Voltage > 5 V	Voltage < 0.8 V
		
NPN Output	Open Collector ON	Open Collector OFF
		
PNP Output	Open Collector ON	Open Collector OFF
		

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Applications



Pin Assignments



Ordering Information

ET-7083 CR	Ethernet I/O Module with 3-ch Encoder/Counter Input (RoHS)
PET-7083 CR	PoE I/O Module with 3-ch Encoder/Counter Input (RoHS)

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