



ET-7005 **PET-7005**

Ethernet I/O Module with 8-ch Thermistor Input, 4-ch DO

Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Access Control
- Dual Watchdog
- I/O Pair Connection
- Built-in I/O
  - Thermistor Input: 8 Channels
  - DO: 4 Channels

Introduction

ET-7005/PET-7005 is used for measuring temperature by the thermistor. It supports many kinds of thermistors and features individual channel configuration which means that eight of its input channels can individually be configured with a different kind of thermistor and supports user-defined types by specifying the Steinhart coefficients to add other thermistors, if necessary. Besides, ET-7005/PET-7005 also has 4-channel digital outputs for alarm output with short-circuit protection and overload protection. Adding 2500 V_{DC} intra-module isolation and 110 V_{DC}/V_{AC} overvoltage protection for the thermistor on ET-7005/PET-7005 makes itself run with higher reliability.

System Specifications

Model	ET-7005	PET-7005
Software		
Built-in Web Server	Yes	
CPU Module		
Watchdog Timer	Module, Communication (Programmable)	
2-Way Isolation		
Ethernet	1500 V_{DC}	-
I/O	2500 V_{DC}	2500 V_{DC}
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	2.1 W (max.)	3.0 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1
Powered from Terminal Block	+10 ~ +30 V_{DC}	+12 ~ +48 V_{DC}
Mechanical		
Dimensions (mm)	72 x 123 x 35 (W x L x H)	
Installation	DIN-Rail Mounting	
Environment		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

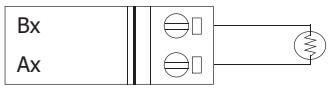
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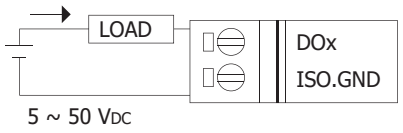
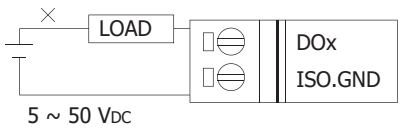
I/O Specifications

Analog Input	
Channels	8 (Differential)
Type	Thermistor
Sensor Type	Precon ST-A3, Fenwell U, YSI L100, YSI L300, YSI L1000, YSI B2252, YSI B3000, YSI B5000, YSI B6000, YSI B10000, YSI H10000, YSI H30000, User-defined
Resolution	16-bit
Accuracy	±0.1% or better
Sampling Rate	10 Hz (total channels)
Overvoltage Protection	+110 VDC/VAC
Individual Channel Configuration	Yes
Open Wire Detection	Yes
Digital Output	
Channels	4
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+5 ~ +50 VDC
Load Current	700 mA/channel
Overvoltage Protection	+60 VDC
Overload Protection	1.4 A
Short-circuit Protection	Yes
Power on Value	Programmable
Safe Value	Programmable

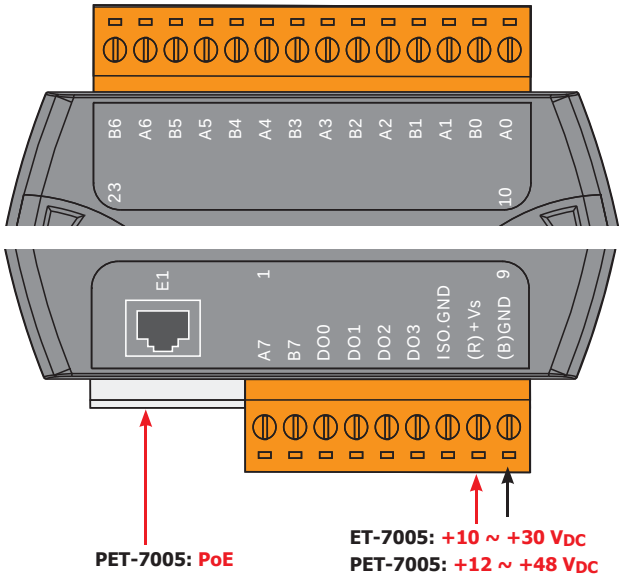
Wire Connections

Thermistor Input



Digital Output	ON State, Readback as 1
Open Collector (Sink)	 5 ~ 50 VDC
	OFF State, Readback as 0
	 5 ~ 50 VDC

Pin Assignments



Ordering Information

ET-7005 CR	Ethernet I/O Module with 8-ch Thermistor Input, 4-ch DO (RoHS)
PET-7005 CR	PoE I/O Module with 8-ch Thermistor Input, 4-ch DO (RoHS)

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