



**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 VDC intra-module isolation and 110 VDC/VAC overvoltage protection for the thermistor on ET-7005/PET-7005 makes itself run with higher reliability.

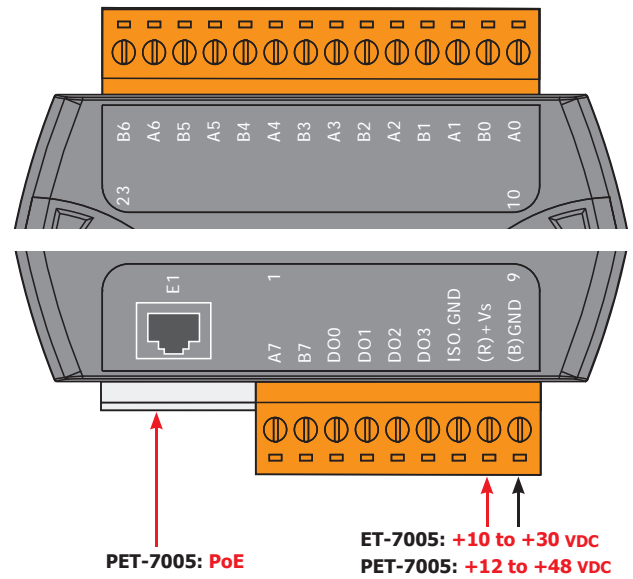
**System Specifications**

Model	ET-7005	PET-7005
<b>Software</b>		
Built-in Web Server	Yes	
<b>CPU Module</b>		
Watchdog Timer	Module, Communication (Programmable)	
<b>2-Way Isolation</b>		
Ethernet	1500 VDC	-
I/O	2500 VDC	2500 VDC
<b>EMS Protection</b>		
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	
<b>LED Indicators</b>		
Status	Run, Ethernet	Run, Ethernet, PoE
<b>Ethernet</b>		
Ports	1 x RJ-45, 10/100 Base-TX	
PoE	-	Yes
Access Control	ID, Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP	
<b>Power</b>		
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 to +30 VDC	+12 to +48 VDC
<b>Mechanical</b>		
Dimensions (mm)	72 x 123 x 35 (W x L x H)	
Installation	DIN-Rail mounting	
<b>Environment</b>		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-30 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

## 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 to +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

## Pin Assignments



## Wire Connections

Thermistor Input		
Digital Output	ON State Readback as 1	OFF State Readback as 0
Open Collector (Sink)		

## Ordering Information

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