



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 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 thermistor on ET-7005/PET-7005 makes itself running with higher reliability.

System Specifications _____

Models	ET-7005	PET-7005		
Software				
Built-in Web Server	Yes			
Web HMI	Yes			
I/O Pair Connection	Yes			
Communication				
Ethernet Port	10/100 Base-TX with Auto MDI/MDI-X			
РоЕ	-	Yes		
Protocol	Modbus TCP, Modbus UDP			
Security	ID, Password and IP Filter			
Dual Watchdog	Yes, Module (0.8 seconds), Communication (Programmable)			
LED Indicators				
L1 (System Running)	Yes			
L2 (Ethernet Link/Act)	Yes			
L3 (Ethernet 10/100 M Speed)	Yes			
PoE Power	-	Yes		
2-Way I solation				
Ethernet	1500 VDC	-		
I/O	2500 VDC	2500 VDC		
EMS Protection				
ESD (IEC 61000-4-2)	4 kV Contact for Each Terminal and 8 kV Air for Random Point			
EFT (IEC 61000-4-4)	+/-4 kV for Power			
Power				
Reverse Polarity Protection	Yes			
Powered from Terminal Block	Yes, 10 ~ 30 V _{DC}	Yes, 12 ~ 48 V _{DC}		
Powered from PoE	-	Yes, IEEE 802.3af, Class1		
Power Output	-	-		
Consumption	2.1 W	3.0 W		
Mechanical				
Dimensions (W x L x H)	72 mm x 123 mm x 35 mm			
Installation	DIN-Rail or Wall Mounting			
Environment				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	$10 \sim 90\%$ RH, Non-condensing			

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Thermistor I nput				
Channels	8 (Differential)			
Sensor Type (thermistor)	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			
Individual Channel Configuration	Yes			
Resolution	16-bit			
Sampling Rate	10 Sample/Second (Total)			
Accuracy	+/-0.1% or better			
Zero Drift	+/-20 μV/°C			
Span Drift	+/-25 ppm/°C			
Overvoltage Protection	110 VDC/VAC			
Common Mode Rejection	86 dB			
Normal Mode Rejection	100 dB			
Open Wire Detection	Yes			
Digital Output				
Channels	4			
Туре	Isolated Open Collector			
Sink/Source (NPN/PNP)	Sink			
Max. Load Current	700 mA/Channel			
Load Voltage	5 V _{DC} ~ 50 V _{DC}			
Overvoltage Protection	60 VDC			
Overload Protection	1.4 A			
Short-circuit Protection	Yes			
Power-on Value	Yes, Programmable			
Safe Value	Yes, Programmable			

I/ O Specifications _____

■ Pin Assignments

Wire Connections _____

Thermistor I nput				
Bx Ax				
Digital Output	ON State Readback as 1	OFF State Readback as 0		
Open Collector (Sink)	LOAD LOAD DOx ISO.GND 5 ~ 50 Vbc	X LOAD DOX ISO.GND 5 ~ 50 VDC		

Ordering Information _____

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