

**ET-7015**  
**PET-7015**

**ET-7215**  
**PET-7215**

Ethernet I/O Module with 7-channels RTD Inputs

## Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Security
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C
- I/O Pair Connection
- Built-in I/O
  - RTD Input: 7 Channels



## Introduction

The ET-7015/PET-7015/ET-7215/PET-7215 is specifically designed for long-distance RTD measurement. It features automatic compensation for three-wire RTD regardless of the length of wires and provides open wire detection for RTD measurement. The ET-7015/PET-7015/ET-7215/PET-7215 offers 7 channels, each of which could be connected with different kinds of RTD (Pt100, Pt1000, Ni120, Cu100, Cu1000). Also, The ET-7015/PET-7015/ET-7215/PET-7215 is fully RoHS-compliant and has qualification for 4 kV ESD protection as well as 2500 Vdc intra-module isolation.

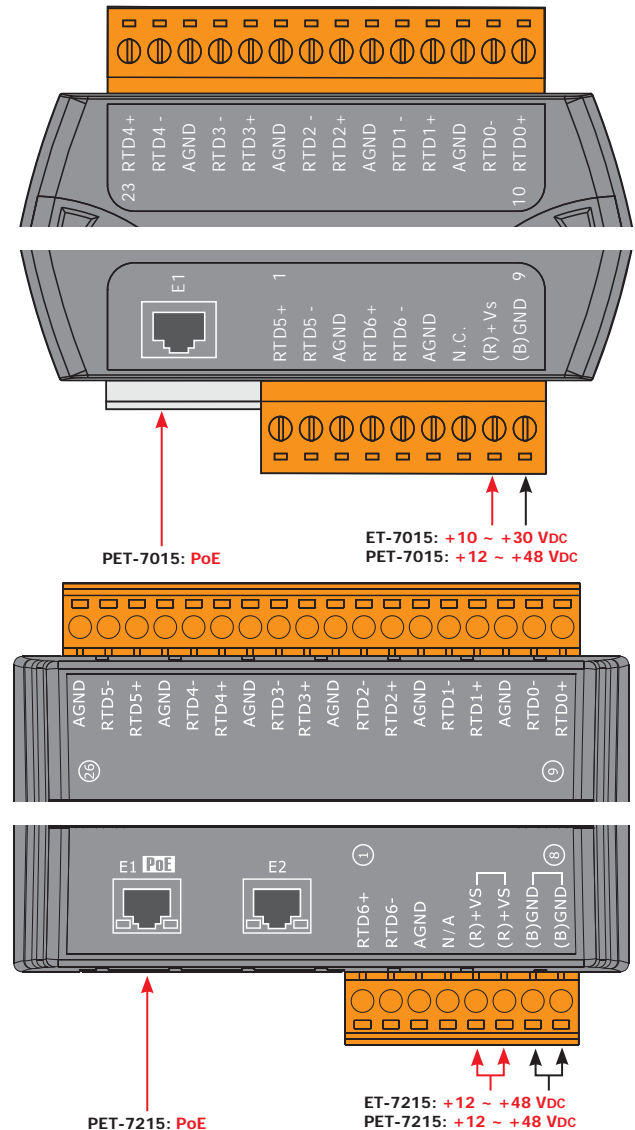
## System Specifications

Models	ET-7015	PET-7015	ET-7215	PET-7215
<b>Software</b>				
Built-in Web Server			Yes	
Web HMI			Yes	
I/O Pair Connection			Yes	
<b>Communication</b>				
Ethernet Port	1 x RJ-45, 10/100 Base-TX		2 x RJ-45, 10/100 Base-TX, Switch Ports	
PoE	-	Yes	-	Yes
Protocol	Modbus TCP, Modbus UDP			
Security	ID, Password and IP Filter			
Dual Watchdog	Yes, Module (0.8 seconds), Communication (Programmable)			
<b>LED Indicators</b>				
for System Running			Yes	
for Ethernet Link/Act			Yes	
for DI/DO status			-	
for PoE Power	-	Yes	-	Yes
<b>2-Way Isolation</b>				
Ethernet	1500 Vdc	-	1500 Vdc	-
I/O	2500 Vdc		3000 Vdc	
<b>EMS Protection</b>				
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 Line		±2 kV for Power Line	
Surge (IEC 61000-4-5)	±0.5 kV for Power Line		±2 kV for Power Line	
<b>Power</b>				
Reverse Polarity Protection	Yes			
Powered from Terminal Block	10 ~ 30 Vdc	12 ~ 48 Vdc	12 ~ 48 Vdc	12 ~ 48 Vdc
Powered from PoE	-	Yes, IEEE 802.3af, Class1	-	Yes, IEEE 802.3af, Class1
Consumption	2.2 W (Max.)	2.6 W (Max.)	3.0 W (Max.)	3.2 W (Max.)
<b>Mechanical</b>				
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm		120 mm x 76 mm x 38 mm	
Installation	DIN-Rail or Wall Mounting			
<b>Environment</b>				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

## I/O Specifications

RTD Input	
Channels	7 (Differential)
Sensor Type	Pt100, Pt1000, Ni120, Cu100, Cu1000
Wire Connections	2/3 wire
Individual Channel Configuration	Yes
Resolution	16-bit
Sampling Rate	12 Samples/Second (Total)
Accuracy	+/-0.05%
Zero Drift	+/-0.5 $\mu\text{V}/^\circ\text{C}$
Span Drift	+/-20 $\mu\text{V}/^\circ\text{C}$
Overvoltage Protection	110 Vdc/VAc
Common Mode Rejection	150 dB
Normal Mode Rejection	100 dB
Input Impedance	>1M $\Omega$
Open Wire Detection	Yes
3-wire RTD Lead Resistance Elimination	Yes
Overvoltage Protection	120 Vdc
Resistance Measurement	3.2 K $\Omega$ Max.

## Pin Assignments



## Wire Connections

Open Collector (Sink)	CH0, 1, 2, 5 and 6	CH3 and CH4
2-wire of RTD		
3-wire of RTD		

## Ordering Information

<b>ET-7015 CR</b>	Ethernet I/O Module with 7-channels RTD Inputs (RoHS)
<b>PET-7015 CR</b>	PoE Ethernet I/O Module with 7-channels RTD Inputs (RoHS)
<b>ET-7215 CR</b>	Ethernet I/O Module with 2-port Ethernet Switch, with 7-channels RTD Inputs (RoHS)
<b>PET-7215 CR</b>	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 7-channels RTD Inputs (RoHS)