



ET-7017-10
PET-7017-10

ET-7217-10
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(PoE) Ethernet I/O Module with 10/20-ch AI

Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Security
- 2-port Ethernet Switch (LAN Bypass) for Daisy-Chain Wiring
- Dual Watchdog
- I/O Pair Connection
- Built-in I/O
- AI: 10/20 Channels with 240 Vrms Overvoltage Protection



Introduction

The ET-7017-10/PET-7017-10/ET-7217-10/PET-7217-10 is a module with 10-channel differential or 20-channel single-ended analog inputs. It provides programmable input range on all analog channels (+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA, 0 ~ 20 mA and 4 ~ 20 mA). Each analog channel is allowed to configure an individual range and has 240 Vrms high overvoltage protection. Each analog input can be programmed to accept voltage or current as input depending upon the position of the corresponding jumper. The sampling rate of ET-7017-10/PET-7017-10/ET-7217-10/PET-7217-10 has two modes; fast mode and normal mode for your consideration. ET-7017-10/PET-7017-10/ET-7217-10/PET-7217-10 also has qualification for 4 kV ESD protection as well as 3000 VDC intra-module isolation.

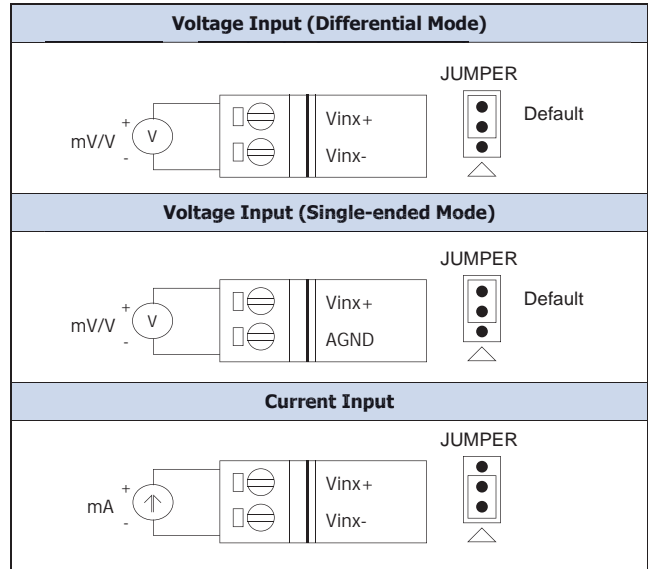
System Specifications

| Model | ET-7017-10 | PET-7017-10 | ET-7217-10 | PET-7217-10 |
|-----------------------------|---|----------------------|---|-------------------------|
| Software | | | | |
| Built-in Web Server | Yes | | | |
| CPU Module | | | | |
| Watchdog Timer | Module, Communication (Programmable) | | | |
| 2-Way Isolation | | | | |
| Ethernet | 1500 VDC | - | 1500 VDC | - |
| I/O | 2500 VDC | | | |
| EMS Protection | | | | |
| EFT (IEC 61000-4-4) | ±4 kV for Power Line | | ±2 kV for Power Line | |
| ESD (IEC 61000-4-2) | ±4 kV Contact for Each Terminal ±8 kV Air for Random Point | | | |
| Surge (IEC 61000-4-5) | ±0.5 kV for Power Line | | ±2 kV for Power Line | |
| LED Indicators | | | | |
| Status | Run, Ethernet | Run, Ethernet, PoE | Run, Ethernet, I/O | Run, Ethernet, I/O, PoE |
| Ethernet | | | | |
| Ports | 1 x RJ-45, 10/100 Base-TX | | 2 x RJ-45, 10/100 Base-TX, Switch Ports | |
| PoE | - | Yes | - | Yes |
| LAN bypass | - | | Yes | |
| Security | ID, Password and IP Filter | | | |
| Protocol | Modbus TCP, Modbus UDP | | | |
| Power | | | | |
| Reverse Polarity Protection | Yes | | | |
| Consumption | 2.8 W (max.) | 3.3 W (max.) | 3.6 W (max.) | 3.8 W (max.) |
| Powered from PoE | - | IEEE 802.3af, Class1 | - | IEEE 802.3af, Class1 |
| Powered from Terminal Block | +10 to +30 VDC | | +12 to +48 VDC | |
| Mechanical | | | | |
| Dimensions (mm) | 72 x 123 x 35 (W x L x H) | | 76 x 120 x 38 (W x L x H) | |
| Installation | DIN-Rail mounting | | | |
| Environment | | | | |
| Operating Temperature | -25 to +75°C | | | |
| Storage Temperature | -30 to +80°C | | | |
| Humidity | 10 to 90% RH, Non-condensing | | | |

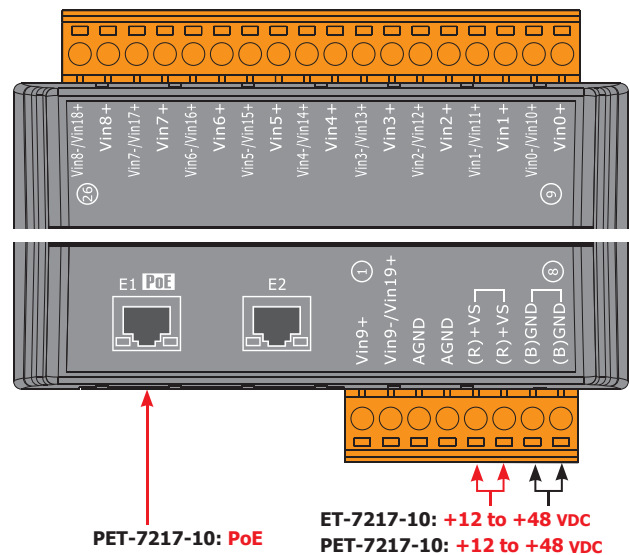
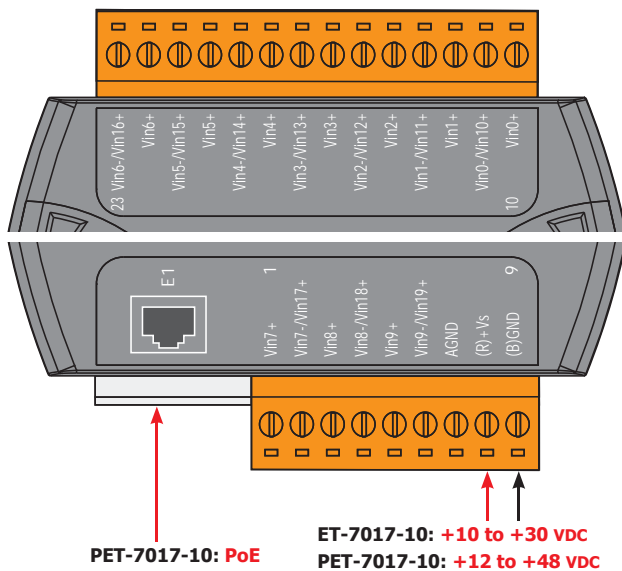
I/O Specifications

| Analog Input | | |
|--|---|---|
| Channels | 10 differential or 20 single-ended (Note1), software selectable | |
| Type | Voltage, Current | |
| Range | ±150 mV, ±500 mV, ±1 V, ±5 V, ±10 V ±20 mA, 0 to 20 mA, 4 to 20 mA (Jumper Selectable) | |
| Resolution | 16-bit | |
| Accuracy | Normal Mode | ±0.1% |
| | Fast Mode | ±0.5% or better |
| Sampling Rate | Normal Mode | 10 Hz (total channels) |
| | Fast Mode | 50 Hz (total channels) |
| Input Impedance | Voltage | 2 MΩ (Differential), 1 MΩ (Single-ended) |
| | Current | 125 Ω |
| Common Voltage Protection | ±200 VDC | |
| Overvoltage Protection | Differential | 240 Vrms |
| | Single-ended | 150 Vrms |
| Overcurrent Protection | 50 mA at 110 VDC (max.) | |
| Individual Channel Configuration | Yes | |
| Open Wire Detection | For 4 to 20 mA only | |
| Virtual Channel to Channel Isolation | ±400 VDC | |
| Note1: Differential mode can be used for voltage input and current input. Single-Ended mode can be used for voltage input only. | | |

Wire Connections



Pin Assignments



Ordering Information

| | |
|----------------|--|
| ET-7017-10 CR | Ethernet I/O Module with 10/20-ch AI (RoHS) |
| PET-7017-10 CR | PoE Ethernet I/O Module with 10/20-ch AI (RoHS) |
| ET-7217-10 CR | Ethernet I/O Module with 2-port Ethernet Switch and 10/20-ch AI (RoHS) |
| PET-7217-10 CR | PoE Ethernet I/O Module with 2-port Ethernet Switch and 10/20-ch AI (RoHS) |