

ET-7217RMS PET-7217RMS

Ethernet I/O Module with 2-port Ethernet Switch, 8-ch RMS Input, 4-ch DO

Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Access Control
- 2-port Ethernet Switch (LAN bypass) for Daisy-chain Wiring
- Dual Watchdog
- I/O Pair Connection
- Built-in I/O
  - AI: 8 Channels True RMS Input
  - DO: 4 Channels

Introduction

The ET-7217RMS/PET-7217RMS is an 8-channel differential AC input and 4-channel digital outputs module that is used to convert the AC input signals to their True RMS DC values. The RMS input range can be from +150 mVrms to +10 Vrms, and each channel can be configured individually. The ET-7217RMS/PET-7217RMS is a complete, high-accuracy, RMS-to-DC converter that computes the True RMS DC value of any complex waveform. It also features 4 kV ESD protection, 2500 V_{DC} intra-module isolation, and ±35 V_{rms}/±28 V_{DC} overvoltage protection.

System Specifications

Model	ET-7217RMS	PET-7217RMS
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}	
EMS Protection		
EFT (IEC 61000-4-4)	±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)	±2 kV for Power Line	
LED Indicators		
Status	Run, Ethernet, I/O	Run, Ethernet, I/O, PoE
Ethernet		
Ports	2 x RJ-45, 10/100 Base-TX, Swtich Ports	
PoE	-	Yes
LAN bypass	Yes	
Access Control	ID, Password and IP Filter	
Protocol	Modbus TCP, Modbus UDP	
Power		
Reverse Polarity Protection	Yes	
Consumption	4.2 W (max.)	4.4 W (max.)
Powered from PoE	-	IEEE 802.3af, Class1
Powered from Terminal Block	+12 ~ +48 V_{DC}	
Mechanical		
Dimensions (mm)	76 x 120 x 42 (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	

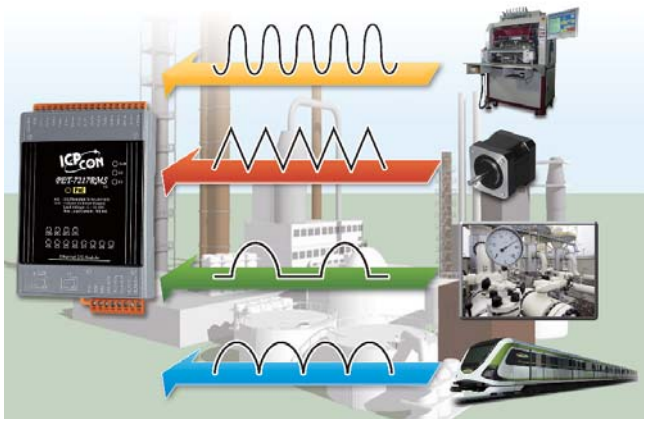
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I/O Specifications

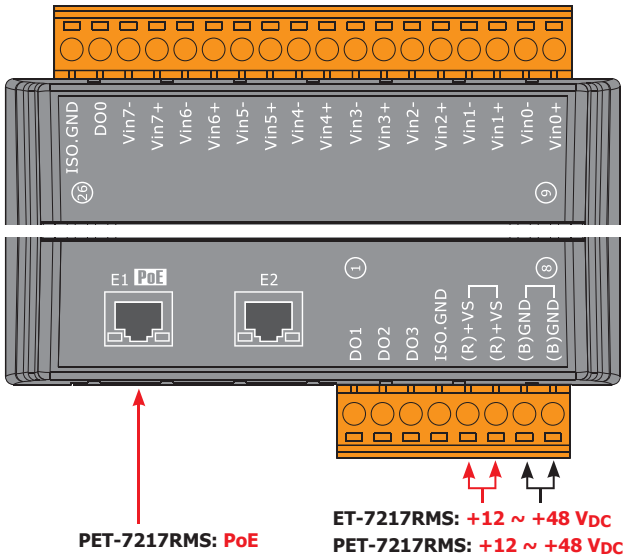
Analog Input		
Channels		8 (Differential)
Type		True RMS
Resolution		16-bit
Accuracy	**Sinusoid**	
	50/60 Hz	±0.15% of FSR
	45 Hz ~ 10 kHz	±0.5% of FSR
	Non-Sinusoid	
	Crest Factor = 1 ~ 2	±0.2% of FSR
	Crest Factor = 2 ~ 3	±0.35% of FSR
	DC	
	0 ~ 10 Vrms, 0 ~ 5 Vrms, 0 ~ 1 Vrms	±0.3% of FSR
	0 ~ 500 mVrms, 0 ~ 150 mVrms	±0.7% of FSR
Sampling Rate		10 Hz (total channels)
Input Impedance		>2 MΩ
Overvoltage Protection		±35 Vrms/±28 VDC
Individual Channel Configuration		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

Applications

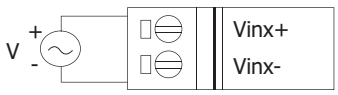
- Building Automation
- Factory Automation
- Remote Diagnosis
- Machine Automation
- Remote Maintenance
- Testing Equipment

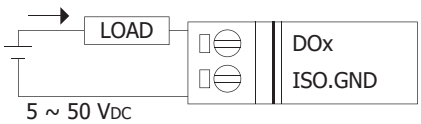
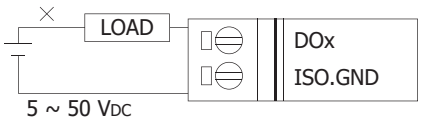


Pin Assignments



Wire Connections

Voltage Input


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

Ordering Information

ET-7217RMS CR	Ethernet I/O Module with 2-port Ethernet Switch, 8-ch AI, 4-ch DO (RoHS)
PET-7217RMS CR	PoE I/O Module with 2-port Ethernet Switch, 8-ch AI, 4-ch DO (RoHS)

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