



ETS-7217

Ethernet I/O Module, 8-ch AI, 4-ch DO

■ Features

- Support for HTTP/HTTPS Web Server
- Enhanced DoS Protection
- Support for Modbus/TCP Security
- Support for OPC UA、MQTT with TLS
- Support for 802.1Q VLAN
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog with Power-on and Safe Value
- I/O Pair Connection
- Built-in I/O
- AI: 8 Channels with 240 Vrms Overvoltage Protection
- DO: 4 Channels
- Fast Boot (< 5 Second)



■ Introduction

The ETS-7217 has 8 differential analog inputs, 4 digital outputs, and supports OPC UA, MQTT, RESTful API, CoAP, LwM2M, and Modbus protocols. The module supports the TLS to secure such as web traffic (HTTPS), emails, messaging, OPC UA and MQTT. It offers programmable input ranges and digital alarm outputs with short-circuit and overload protection. Each analog channel is individually configurable and includes 240Vrms high overvoltage protection.

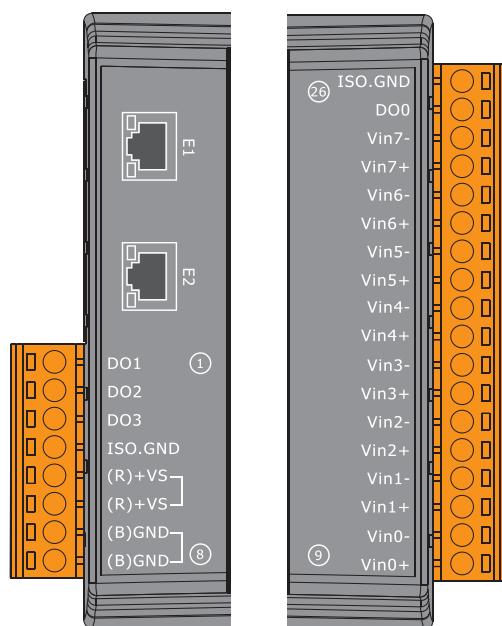
■ System Specifications

Model	ETS-7217
Software	
Function	Web Interface for Configuration / IF-THEN-ELSE Logic operation I/O channel monitoring and control / Timer operation Schedule operation / Internal Register operation / Email sending function
CPU Module	
Watchdog Timer	Module, Communication (Programmable)
2-way Isolation	
Ethernet	1500 VDC
I/O	2500 VDC
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
Ethernet	
Ports	2 x RJ-45, 10/100 Base-TX, Switch Ports
LAN bypass	Yes
Access Control	ID, Password and IP Filter
Protocol	Modbus TCP, Modbus TCP/TLS, Modbus UDP, OPC UA, MQTT, RESTful API, CoAP, LwM2M, SNMP, SMTP, SNTP, HTTP/HTTPS
Power	
Reverse Polarity Protection	Yes
Consumption	4.2 W (max.)
Powered from Terminal Block	+12 ~ +48 VDC
Mechanical	
Dimensions (mm)	76 x 120 x 38 (W x L x H)
Installation	DIN-Rail mounting
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +80°C
Humidity	10 to 90% RH, Non-condensing

I/O Specifications

Analog Input	
Channels	8 (Differential)
Type	Voltage, Current
Range	$\pm 150 \text{ mV}$, $\pm 500 \text{ mV}$, $\pm 1 \text{ V}$, $\pm 5 \text{ V}$, $\pm 10 \text{ V}$, $\pm 20 \text{ mA}$, $0 \sim 20 \text{ mA}$, $4 \sim 20 \text{ mA}$ (Jumper Selectable)
Resolution	16-bit
Accuracy	Normal Mode : $\pm 0.1\%$, Fast Mode : $\pm 0.5\%$ or better
Sampling Rate	Normal Mode : 10 Hz (total channels), Fast Mode : 50 Hz (total channels)
Input Impedance	Voltage : $2 \text{ M}\Omega$ Current : $125 \text{ }\Omega$
Common Voltage Protection	$\pm 200 \text{ VDC}$
Overshoot Protection	240 Vrms
Overshoot Protection	50 mA @ 110 VDC (max.)
Individual Channel Configuration	Yes
Open Wire Detection	For 4 to 20 mA only
Isolation	$\pm 400 \text{ VDC}$
Digital Output	
Channels	4
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	$+5 \sim +50 \text{ VDC}$
Max. Load Current	700 mA/channel
Overshoot Protection	+60 VDC
Overload Protection	1.4 A
Short-circuit Protection	Yes
Power on Value	Programmable
Safe Value	Programmable

Pin Assignments



Wire Connections

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

Ordering Information

ETS-7217 CR	Ethernet I/O Module with 2-port Ethernet Switch, 8-ch AI and 4-ch DO (RoHS)
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