



## ET-7017

8-channel Analog Input with High Voltage Protection and 4-channel Isolated Output Module

### Introduction

The ET-7017, a web-based Ethernet I/O module, features a built-in web server, which allows configuration, I/O monitoring and I/O control by simply using a regular web browser. Besides, with the web HMI function, no more programming or HTML skills are needed; creating dynamic and attractive web pages for I/O monitoring and I/O control would be fun to engineers ever after. The ET-7017 offers easy and safe access for users from anytime and anywhere! In addition, ET-7017 also supports Modbus/TCP protocol that makes seamless integration to SCADA software.

The ET-7017 is a 16-bit, 8-channel differential analog inputs and 4-channel digital outputs module that provides programmable input range on all analog channels (+/-150 mV, +/-500 mV, +/-1V, +/-5V, +/-10V, +/-20 mA, 0 ~ 20 mA and 4 ~ 20 mA) and digital output can be set alarm output. Each analog channel is allowed to configure an individual range and has 240 V<sub>ms</sub> high over voltage protection. Jumper selectable for voltage or current input.

### I/O Specifications

Analog Input		
Input Channels	8 (Differential)	
Input Type	+/-150 mV, +/-500 mV, +/-1V, +/-5V, +/-10V +/-20 mA, 0 ~ 20 mA, 4 ~ 20 mA (jumper selectable)	
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	10 Samples/Sec. (Total)
	Fast Mode	50 Samples/Sec. (Total)
Accuracy	Normal Mode	+/-0.1%
	Fast Mode	+/-0.5% or better
Bandwidth	Normal Mode	15.7 Hz
	Fast Mode	78.7 Hz
Zero Drift	+/-20 uV/°C	
Span Drift	+/-25 ppm/°C	
Input Impedance	Voltage	2 MΩ
	Current	125 Ω
Common Mode Rejection		86 dB Min.
	Normal Mode Rejection	100 dB
Over Voltage Protection	240 V <sub>ms</sub>	
ESD Protection		+/-4 kV (Contact for each channel)
		+/-8 kV air for random point
EFT Protection	+/-4 kV for Power	
Digital Output		
Output Channels	4 (Sink)	
Output Type	Isolated Open Collector	
Max. Load Current	700 mA/Channel	
Load Voltage	5 V <sub>cc</sub> ~ 50 V <sub>cc</sub>	

## Analog Input & Digital Output

### Features

- Built-in Web Server
- Communication Security
- Modbus/TCP Protocol
- 2-way Isolation/ESD Protection
- Built-in Dual Watchdog
- 10/100 Base-TX Ethernet
- I/O Pair Connection
- AI Type: 8 Differential (mV, V, mA)
- DO Type: 4 Open Collector Output
- Over Voltage Protection is up to 240 V<sub>ms</sub>
- Jumper Setting for Current or Voltage Input



### Applications

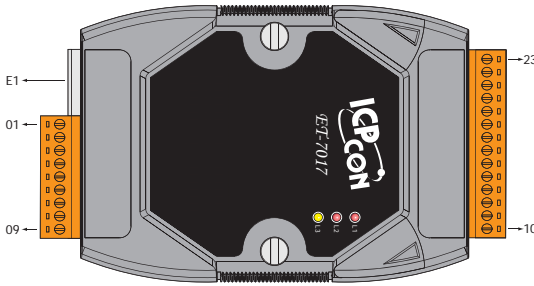
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.

### System Specifications

System	
CPU	80186 CPU (80 MHz)
SRAM	512 KB
Flash Memory	512 KB
EEPROM	16 KB
Dual Watchdog	Yes
Communication	
Ethernet Port	10/100 Base-TX (With link, activity led indicator) and auto MDI/MDI-X connection
2-way Isolation	
Ethernet	1500 V <sub>cc</sub>
AI and DO	2500 V <sub>cc</sub>
LED Display	L1 LED as run indicator
	L2 LED as Link/Act indicator
	L3 LED as 10/100M indicator
Power Requirements	
Protection	Power reverse polarity protection
Required Supply Voltage	+10 V <sub>cc</sub> ~ +30 V <sub>cc</sub> (non-regulated)
Power Consumption	0.10 A @ 24 V <sub>cc</sub> Max.
Mechanical	
Dimensions (W x H x D)	72 mm x 123 mm x 35 mm
Installation	DIN-Rail or Wall mounting
Environment	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-30 °C ~ +80 °C
Humidity	5 ~ 90% RH, non-condensing

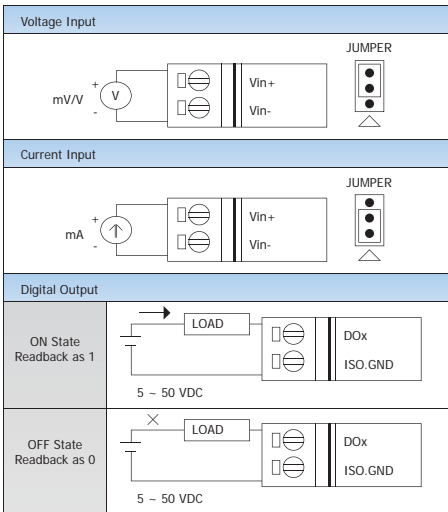
## Pin Assignment

Terminal No.	Pin Assignment
E1	RJ-45
01	Vin7+
02	Vin7-
03	DO0
04	DO1
05	DO2
06	DO3
07	ISO_GND
08	(R)Vs+
09	(B)GND

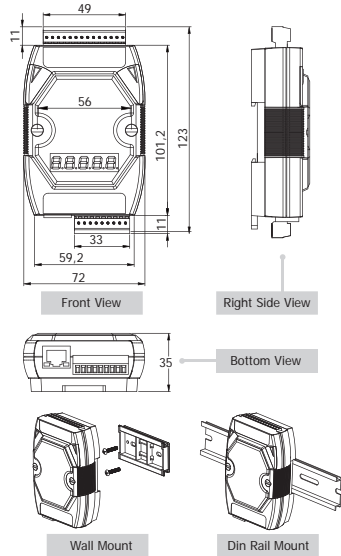


Terminal No.	Pin Assignment
23	Vin6-
22	Vin6+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

## Wire Connection



## Dimensions (Unit: mm)



## Ordering Information

ET-7017 CR	8-channel Analog Input with High Voltage Protection and 4-channel Isolated Output Module (RoHS)
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## Accessories

GPSU06U-6	24V/0.25A, 6 W Power Supply
MDR-20-24	24V/1A, 24 W Power Supply with DIN-Rail Mounting
NS-205 CR	Unmanaged 5-Port Industrial Ethernet Switch (RoHS)

## Related Products

Converters	USB, RS-232, Fiber Optical to RS-485 Converters and Repeaters	Learning Kit	Starter Learning Kit
Power Supply	24 Vdc: Power Supply	Application Books	Application Books Designed with Our Products
Relay Module	External Relay Modules for ET-7000 DO Module	Data Logger Software	User Friendly Data Logger Software (free)