



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, ± 1 V, ± 5 V, ± 10 V, ± 20 mA, $0 \sim 20$ mA and $4 \sim 20$ mA) and digital output can be set alarm output. Each analog channel is allowed to configure an individual range and has 240 V_{rms} 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, ± 1 V, ± 5 V, ± 10 V, ± 20 mA, $0 \sim 20$ mA, $4 \sim 20$ mA (jumper selectable)
Resolution	Normal Mode
	16-bit
Fast Mode	12-bit
Sampling Rate	Normal Mode
	10 Samples/Sec. (Total)
Fast Mode	60 Samples/Sec. (Total)
Accuracy	Normal Mode
	$\pm 0.1\%$
Fast Mode	$\pm 0.5\%$ or better
Bandwidth	Normal Mode
	15.7 Hz
Fast Mode	78.7 Hz
Zero Drift	± 20 μ V/ $^{\circ}$ C
Span Drift	± 25 ppm/ $^{\circ}$ C
Input Impedance	Voltage
	2 M Ω
Current	125 Ω
Common Mode Rejection	86 dB Min.
	Normal Mode Rejection
100 dB	240 V _{rms}
	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 _{cc} \sim 50 V _{cc}

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_{rms}
- Jumper Setting for Current or Voltage Input



Applications

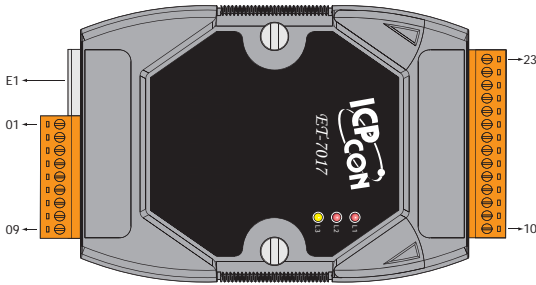
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.

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
2-way Isolation	
Ethernet	1500 V _{cc}
AI and DO	2500 V _{cc}
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 _{cc} \sim $+30$ V _{cc} (non-regulated)
Power Consumption	0.10 A @ 24 V _{cc} 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 $^{\circ}$ C \sim $+75$ $^{\circ}$ C
Storage Temperature	-30 $^{\circ}$ C \sim $+80$ $^{\circ}$ C
Humidity	$5 \sim 90\%$ RH, non-condensing

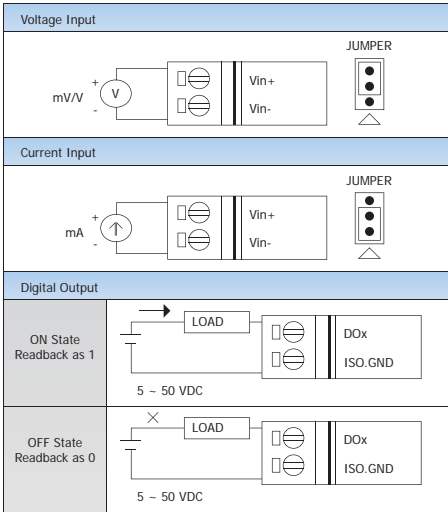
Pin Assignment

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

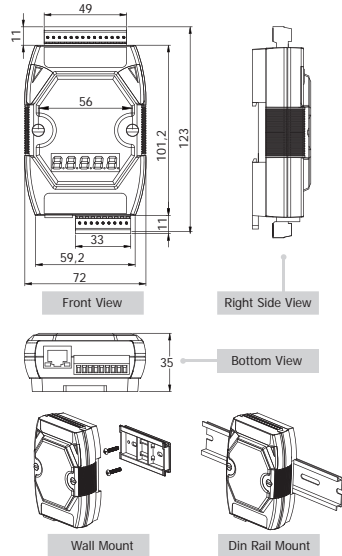


Terminal No.	Pin Assignment
23	Vin6-
22	Vin6+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

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)