



ET-7017-10

10/20-channel Analog Input Module with High Voltage Protection

Introduction

The ET-7017-10, 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-7017-10 offers easy and safe access for users from anytime and anywhere! In addition, ET-7017-10 also supports Modbus/TCP protocol that makes seamless integration to SCADA software.

The ET-7017 is a 16-bit, 10-channel differential or 20-channel single-ended analog inputs 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). 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	10 differential or 20 single-ended (Note1), software selectable	
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 (Differential), 1 MΩ (Single-ended)
	Current	125 Ω
Common Mode Rejection	86 dB Min.	
Normal Mode Rejection	100 dB	
Overvoltage Protection	Differential	240 V _{rms}
	Single-ended	150 V _{rms}
ESD Protection	+/-4 kV (Contact for each channel) +/-8 kV air for random point	
EFT Protection	+/-4 kV for Power	

Note1: Differential mode can be used for voltage input and current input. Single-Ended mode can be used for voltage input only.

Analog Input

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: 10 Differential or 20 Single-Ended (mV, V, mA)
- Over Voltage Protection is up to 240 V_{rms}
- Jumper Setting for Current or Voltage Input
- Individual Channel Configuration



Applications

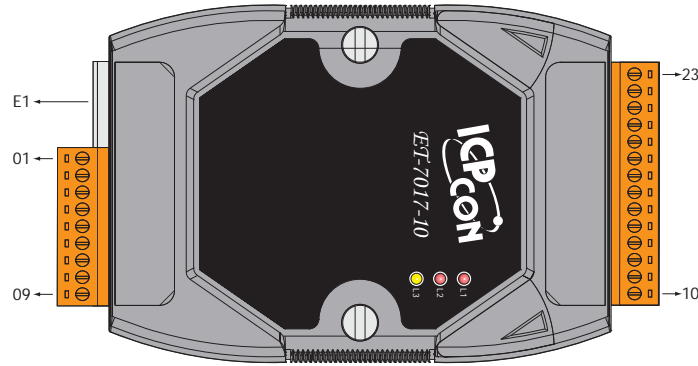
Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.

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 _{dc}
AI	2500 V _{dc}
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 _{dc} ~ +30 V _{dc} (non-regulated)
Power Consumption	0.11 A @ 24 V _{dc} 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

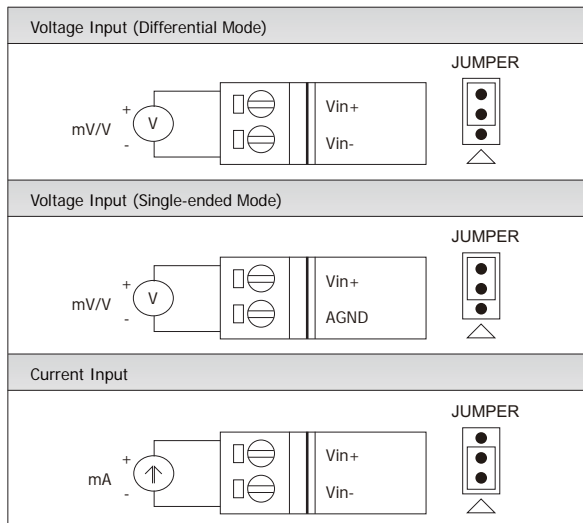
Pin Assignment

Terminal No.	Pin Assignment
E1	RJ-45
01	Vin7+
02	Vin7-/Vin17+
03	Vin8+
04	Vin8-/Vin18+
05	Vin9+
06	Vin9-/Vin19+
07	AGND
08	(R)Vs+
09	(B)GND

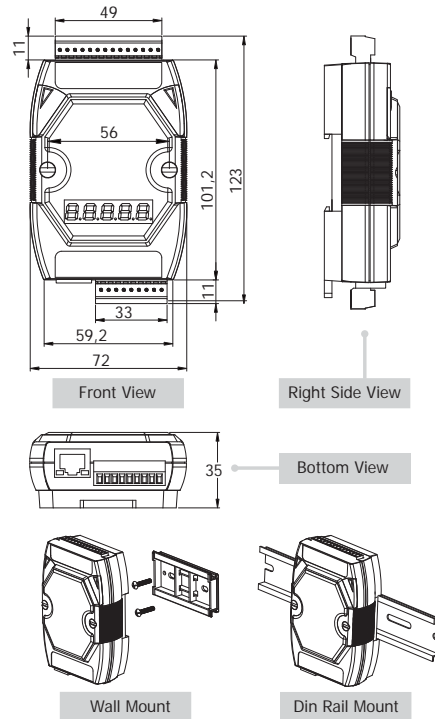


Terminal No.	Pin Assignment
23	Vin6-/Vin16+
22	Vin6+
21	Vin5-/Vin15+
20	Vin5+
19	Vin4-/Vin14+
18	Vin4+
17	Vin3-/Vin13+
16	Vin3+
15	Vin2-/Vin12+
14	Vin2+
13	Vin1-/Vin11+
12	Vin1+
11	Vin0-/Vin10+
10	Vin0+

Wire Connection



Dimensions (Unit: mm)



Ordering Information

ET-7017-10 CR	10/20-channel Analog Input Module with High Voltage Protection (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)