



ET-7026

6-channel Analog Input, 2-channel Analog Output, 2-channel Digital Input And 2-channel Digital Output Module

Introduction

The ET-7026, 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-7026 offers easily and safely access for users from anytime and anywhere! In addition, ET-7026 also supports Modbus/TCP protocol that makes perfect integration to SCADA software. The ET-7026 is a multi-function module, there are 6-channel analog inputs, 2-channel analog output, 2-channel digital inputs and 2-channel digital outputs module. It provides programmable input range on all analog inputs ($\pm 500\text{mV}$, $\pm 1\text{V}$, $\pm 5\text{V}$, $\pm 10\text{V}$, $\pm 20\text{mA}$, $0\sim 20\text{mA}$ and $4\sim 20\text{mA}$), analog outputs are 12 bit with $\pm 5\text{V}$, $\pm 10\text{V}$, $\pm 20\text{mA}$, $0\sim 20\text{mA}$ and $4\sim 20\text{mA}$ and digital output can be set alarm output. Each analog input is allowed to configure an individual range and has 240Vrms high over voltage protection. Jumper selectable for voltage or current inputs/outputs.

I/O Specifications

Analog Input		
Input Channels		6 (Differential)
Input Type		$\pm 500\text{ mV}$, $\pm 1\text{V}$, $\pm 5\text{ V}$, $\pm 10\text{ V}$ $+ 0\text{ mA} \sim + 20\text{ mA}$, $\pm 20\text{ mA}$, $4\sim 20\text{mA}$ (Jumper selectable)
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Sampling Rate	Normal Mode	10 Samples/Sec.
	Fast Mode	50 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		$\pm 20\text{ uV}/^{\circ}\text{C}$
Span Drift		$\pm 25\text{ ppm}/^{\circ}\text{C}$
Input Impedance		2 M Ω
Common Mode Rejection		86 dB Min.
Normal Mode Rejection		100 dB
Overvoltage Protection		240 V _{rms}
ESD Protection		$\pm 4\text{ kV}$ (Contact for each channel) $\pm 8\text{ kV}$ air for random point
EFT Protection		$\pm 4\text{ kV}$ for Power
Analog Output		
Output Channels		2
Output Type		$+ 0\text{ Vdc} \sim + 5\text{ Vdc}$, $\pm 5\text{ Vdc}$, $+ 0\text{ Vdc} \sim + 10\text{ Vdc}$, $\pm 10\text{ Vdc}$, $+ 0\text{ mA} \sim + 20\text{ mA}$, $4\text{ mA} \sim + 20\text{ mA}$ (Jumper selectable)
Resolution		12-bit
Accuracy		$\pm 0.1\%$ of FSR
Voltage Output Capability		10 V@20 mA
Current Load Resistance		500 Ohms
Power-Up and SafeValue		Yes
Open Wire for Current Output		4 $\sim 20\text{mA}$
Digital Output		
Output Channels		2 (Sink)
Output Type		Isolated Open Collector
Max Load Current		700 mA/Channel
Load Voltage		$+ 5\text{ Vdc} \sim + 50\text{Vdc}$
External Power Reversed Protection and Short Circuit Protection		Yes
Over-Temperature Protection		Yes, 150 $^{\circ}\text{C}$

Multi-Function

Features

- Built-in Web Server
- Communication Security
- Modbus/TCP Protocol
- 2-way Isolated Noise/Surge Protection
- Built-in Dual Watchdog
- 10/100 Base-TX Ethernet
- I/O Pair Connection
- AI Type: 6 Differential (mV, V, mA)
- AO Type: 2 Bipolar (V, mA)
- DO Type: 2 Open Collector Output
- DI Type: 2 (Dry+Wet)



Applications

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

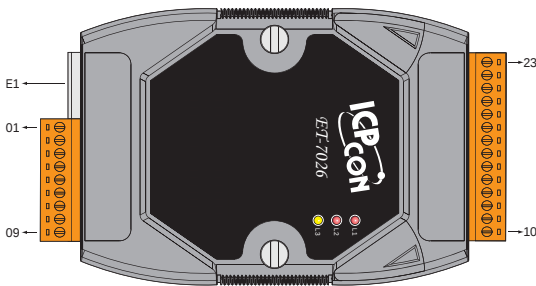
Current limited Protection		1.1 A
Digital Input		
Input Type		2 (Dry+Wet)
Dry Contact (Source)	On Voltage Level	Close to GND
	Off Voltage Level	Open
Wet contact (Sink/ source)	Effective Distance for Dry Contact	500M Max.
	On Voltage Level	$+ 1\text{Vdc Max.}$
Counters	Off Voltage Level	$+ 3.5\text{ Vdc} \sim + 30\text{ Vdc}$
	Channels	2
	Max. Counts	16-bit (65535)
	Max. Input Frequency	100 Hz
Min. Pulse Width		5 ms

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, AO, DI and DO	2500 V _{dc}
LED Display	
L1 LED as run indicator	
L2 LED as Link/Act indicator	
L3 LED as I/O/100M indicator	
Power Requirements	
Protection	
Power reverse polarity protection	
Required Supply Voltage	
$+ 10\text{ Vdc} \sim + 30\text{ Vdc}$ (non-regulated)	
Power Consumption	
0.10 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	
$- 25\text{ }^{\circ}\text{C} \sim + 75\text{ }^{\circ}\text{C}$	
Storage Temperature	
$- 30\text{ }^{\circ}\text{C} \sim + 80\text{ }^{\circ}\text{C}$	
Humidity	
5 $\sim 90\%$ RH, non-condensing	

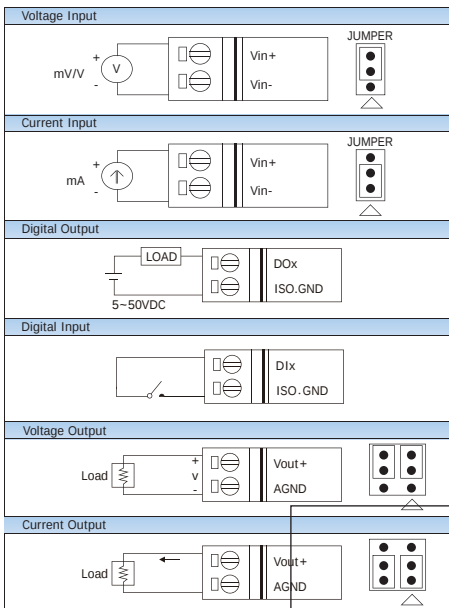
Pin Assignment

Terminal No.	Pin Assignment
E1	RJ-45
01	Vout1+
02	AGND
03	DI0
04	DI1
05	DO0
06	DO1
07	ISO.GND
08	+VS
09	GND

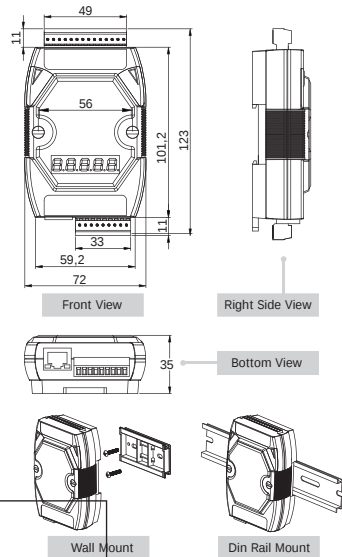


Terminal No.	Pin Assignment
23	AGND
22	Vout0+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

Wire Connection



Dimensions (Unit: mm)



Ordering Information

ET-7026 CR 6-channel Analog Input, 2-channel Analog Output, 2-channel Digital Input And 2-channel Digital Output Module (RoHS)

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)

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