Ethernet I/O Modules

ET-7000 Series (Web based)

ET-7026

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)

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(+/-500mV, +/-1V, +/-5V, +/-10V, +/-20mA, 0~20mA and 4~20mA), analaog outputs are 12 bit with +/-5V, +/-10V, +/-20mA, 0~20mA and 4~20mA 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.

Applications

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

I/O Specifications

Analog Input		
Input Channels		6 (Differential)
Input Type		+/- 500 mV, +/- 1V, +/- 5 V, +/-10 V + 0 mA ~ + 20 mA, +/- 20 mA, 4-20mA (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	+/-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		2 MΩ
Common Mode Rejection		86 dB Min.
Normal Mode Rejection		100 dB
Overvoltage Protection		240 V_rms
ESD Protection		+/-4 kV (Contact for each channel) +/-8 kV air for random point
EFT Protection		+/-4 kV for Power
Analog Output		
Output Channels		2
Output Type		+ 0 V_DC ~ + 5 V_DC, +/- 5 V_DC, + 0 V_DC ~ + 10 V_DC, +/- 10 V_DC, + 0 mA ~ + 20 mA, + 4 mA ~ + 20 mA (jumper selectable)
Resolution		12-bit
Accuracy		+/- 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 ~ 20mA
Digital Output		
Output Channels		2 (Sink)
Output Type		Isolated Open Collector
Max Load Current		700 mA/Channel
Load Voltage		+ 5 V_DC ~ + 50V_DC
External Power Reversed Protection and Short Circuit Protection		Yes
Over-Temperature Protection		Yes, 150^C

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
		Effective Distance for Dry Contact	500M Max.
Wet contact (Sink/ source)		On Voltage Level	+ 1V_DC Max.
		Off Voltage Level	+ 3.5 V_DC ~ + 30 V_DC
Counters		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_rms
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	0.10 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 °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	Vout1+
02	AGND
03	DI0
04	DI1
05	DO0
06	DO1
07	ISO.GND
08	+VS
09	GND
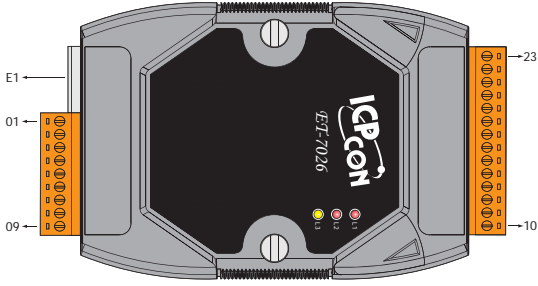
Terminal No.	Pin Assignment
23	AGND
22	Vout0+
21	Vin5-
20	Vin5+
19	Vin4-
18	Vin4+
17	Vin3-
16	Vin3+
15	Vin2-
14	Vin2+
13	Vin1-
12	Vin1+
11	Vin0-
10	Vin0+

Wire Connection

Voltage Input

mV/V — V — Vin+ / Vin- — JUMPER

Current Input

mA — Vin+ / Vin- — JUMPER

Digital Output

LOAD — DOx / ISO.GND — 5~50VDC

Digital Input

DIx / ISO.GND

Voltage Output

Load — V — Vout+ / AGND

Current Output

Load — Vout+ / AGND

Dimensions (Unit: mm)

49
11
56
101.2
123
33
11
59.2
72

Front View

Right Side View

35

Bottom View

Wall Mount

Din Rail Mount
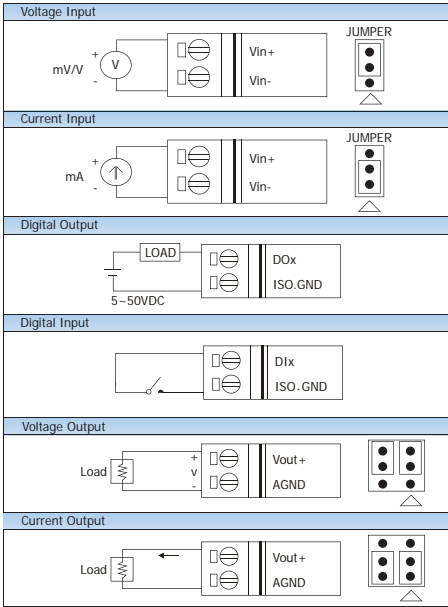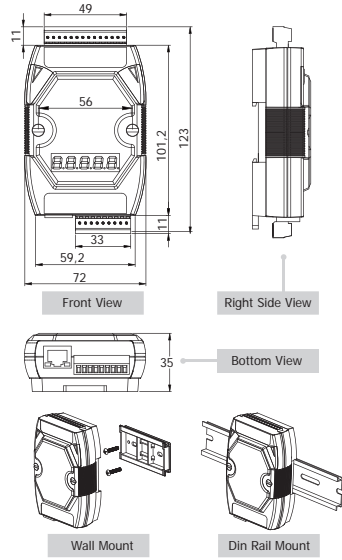
Ordering Information

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)