



I-87026PW

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

Introduction

The 87026PW is a multifunction module that includes 6 analog input channels, 2 analog output channels, 2 digital input channels, 2 digital output channels. It provides a programmable input range on all analog input (+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA, 0 ~ 20 mA or 4 ~ 20 mA), analog outputs are 12 bit at +/-5 V, +/-10 V, 0 ~ 20 mA or 4 ~ 20 mA and all digital outputs can be set as alarm output. Each analog input can be configured for an individual range and provides a high overvoltage protection of 240 V_{rms}. Voltage and current inputs/outputs are jumper selectable.

Applications

- Industrial Automation
- Industrial Machinery
- Building Automation
- Food and Beverage Systems
- Semiconductor Fabrication
- Control Systems

System Specifications

Communication	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicator/Display	
System LED Indicator	1 LED as Power/Communication Indicator
I/O LED Indicator	16 LEDs as High/Low Alarm Signals
Isolation	
Intra-Module Isolation, Field-to-Logic	2500 V _{DC}
EMS Protection	
ESD (IEC 61000-4-2)	4 kV Contact for Each Terminal ±8 kV Air for Random Point
Power	
Power Consumption	1.8 W
Mechanical	
Dimensions (W x L x H)	30 mm x 102 mm x 115 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +80 °C
Humidity	5 ~ 95% RH, Non-condensing

Features

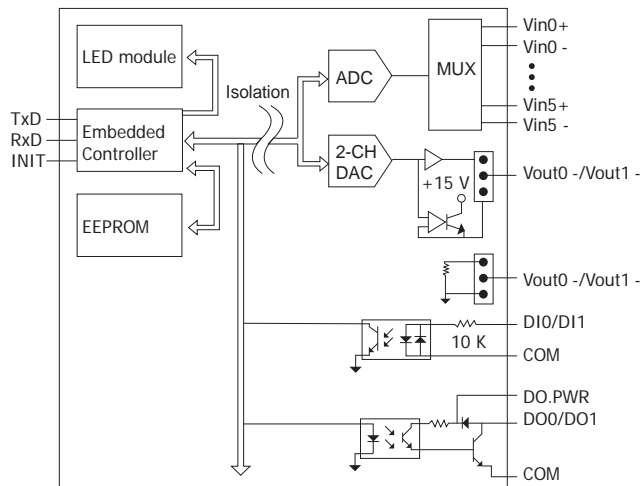
- Multifunction (6AI, 2AO, 2DI and 2DO)
- Supports Fast Mode and Normal Mode
- Individual Channel Configuration
- Open Wire Detection for Current Output
- Overload and Short Circuit Protection for Digital Output
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- 240 Vrms Overvoltage Protection for Voltage Input
- 70 VDC Overvoltage Protection for Digital Input
- Jumper Selectable Voltage or Current Input/Output
- Dual Watchdog
- ±4 kV Contact ESD Protection
- Wide Operating Temperature Range: -25 °C ~ +75 °C



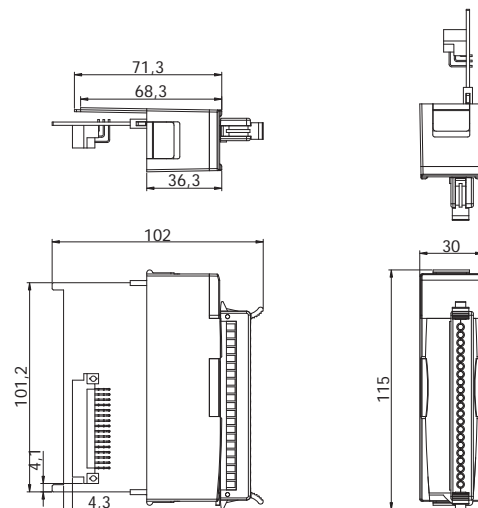
I/O Specifications

Analog Input	
Input Channels	6 (Differential)
Input Type	+/-150mV, +/-500 mV, +/-1V, +/-5 V, +/-10 V +/-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. Fast Mode 60 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
Overvoltage Protection	240 V _{rms}
Individual Channel Configuration	Yes
Analog Output	
Output Channels	2
Output Type	+0 V ~ +5 V, +/-5 V, +0 V ~ +10 V, +/-10 V, +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 Ω
Power-Up and Safe Value	Yes
Open Wire Detection for Current Output	Yes, Only 4 ~ 20 mA.
Digital Output	
Output Channels	2
Output Type	Isolated Open Collector (Sink)
Max Load Current	700 mA/channel Max.
Load Voltage	+3.5 V _{DC} ~ +50 V _{DC}
Overvoltage Protection	60 V _{DC}
Overload Protection	Yes
Short Circuit Protection	Yes
Power-on Value	Yes, Programmable
Safe Value	Yes, Programmable
Digital Input	
Input Channels	2
Input Type	Wet contact (Sink)
On Voltage Level	+3.5 V _{DC} ~ 50 V _{DC}
Off Voltage Level	+1 V _{DC} Max.
Input Impedance	10 KΩ, 0.66W
Counters	Channels 2 Max. Count 32-bit Max. Input Frequency 100 Hz Min. Pulse Width 5 ms
Overvoltage Protection	70 V _{DC}

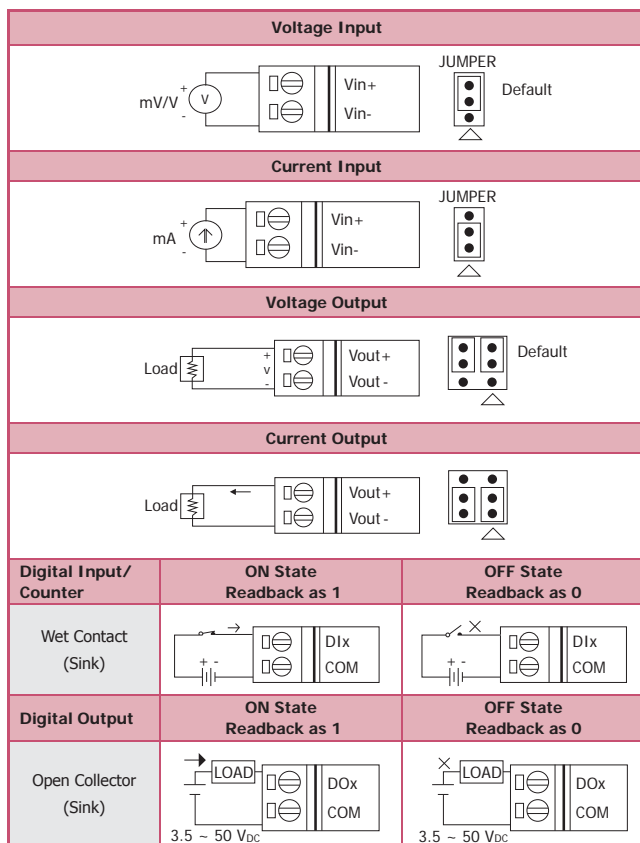
Internal I/O Structure



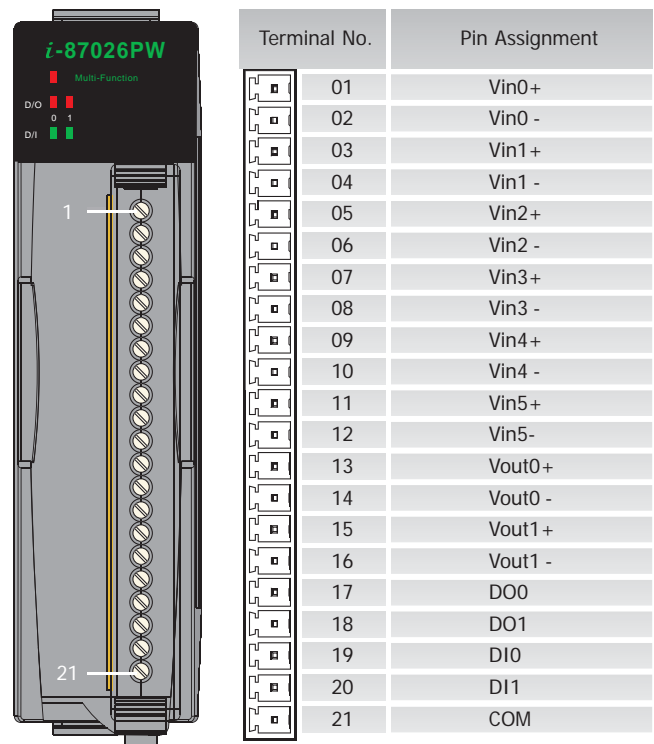
Dimensions (Units: mm)



Wire Connections



Pin Assignments



Ordering Information

I-87026PW CR	6-channel Analog Input, 2-channel Analog Output, 2-channel Digital Input and 2-channel Digital Output Module (RoHS)
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Related Products

Converters	USB, RS-232, Fiber Optical to RS-485 Converters and Repeaters	Learning Kit	Beginner Learning Kit
Power Supply	24 Vdc Power Supply	Application Books	Application Books Designed for Our Products
Relay Module	External Relay Modules for 87000 DO Modules	Data Logger Software	User Friendly Data Logger Software (free)