



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 or 0 ~ 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.

I/O Specifications

Analog Input		
Input Channels	6 (Differential)	
Input Type	+/-150mV, +/-500 mV, +/-1V, +/-5 V, +/-10 V +/-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	
Span Drift	+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	

Multifunction Module

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 V_{rms} Overvoltage Protection for Voltage Input
- 70 V_{dc} 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



Applications

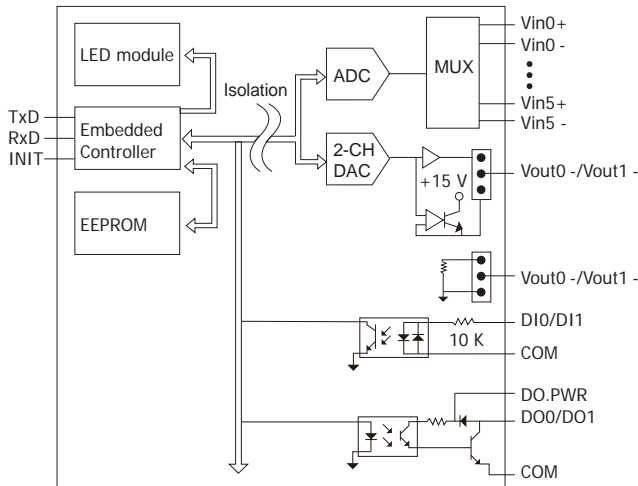
- Industry Automation
- Industrial Machinery
- Building Automation
- Food & Beverage Systems
- Semiconductor Fabrication
- Control Systems

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}	

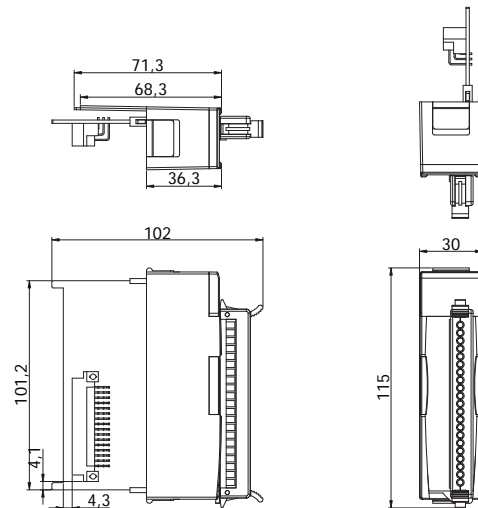
System Specifications

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 Display	1 LED as Power Indicator
	2 LED as Digital Input indicator
	2 LED as Digital Output indicator
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
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +80 °C
Relative Humidity	5 ~ 95% RH, Non-condensing
Dimensions	
	30 mm x 102 mm x 115 mm (W x L x H)

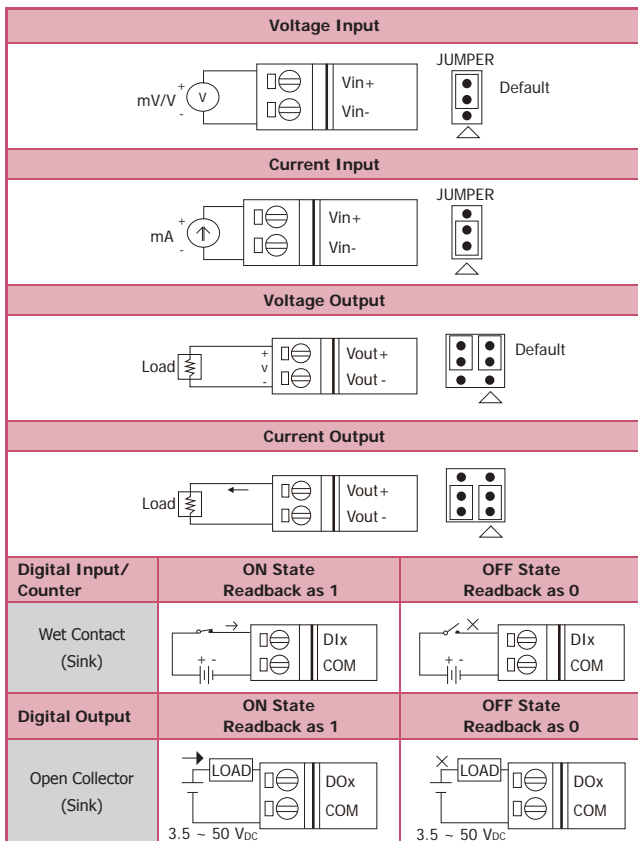
Internal I/O Structure



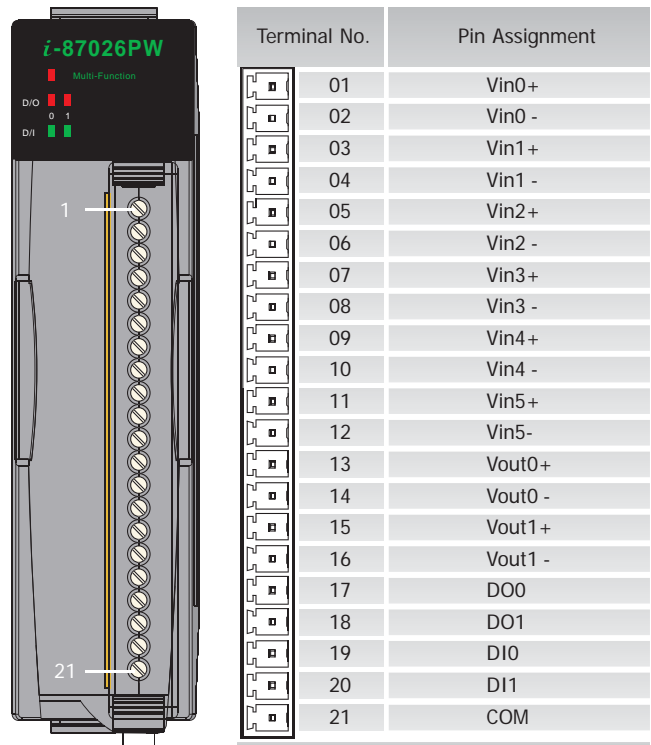
Dimensions (Units: mm)



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 V _{DC} 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)