

I-87026PW-G

6-channel Analog Input, 2-channel Analog Output,
2-channel Digital Input and 2-channel Digital Output 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 Vrms Overvoltage Protectionfor Voltage Input
- 70 VDC Overvoltage Protectionfor Digital Input
- Jumper Selectable Voltage or Current Input/Output
- Dual Watchdog
- ±4 kV Contact ESD Protection
- Wide Operating Temperature Range: -25°C to +75°C

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 Vrms. 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

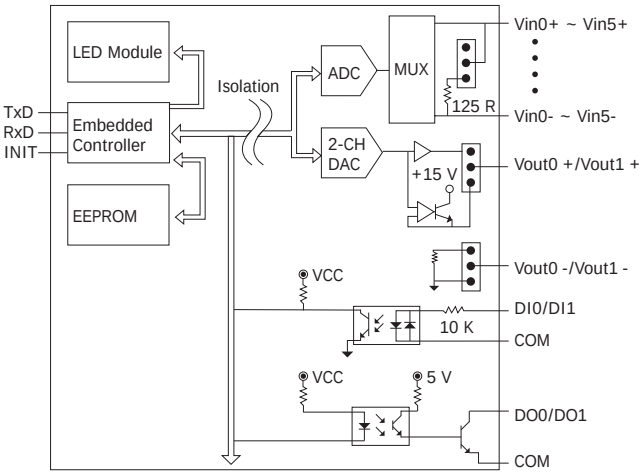
Communication	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 to 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicators/Display	
System LED Indictors	Yes, 1 as Power/Communication Indicator
	Yes, 2 as Digital Input indicator
	Yes, 2 as Digital Output indicator
I/O LED Indicators	16 as High/Low Alarm Signals
Isolation	
Intra-module Isolation, Field-to-Logic	2500 VDC
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 (L × W × H)	115 mm × 30 mm × 102 mm
Environment	
Operating Temperature	-25 to +75°C
Storage Temperature	-40 to +85°C
Humidity	10 to 95% RH, Non-condensing

I/O Specifications

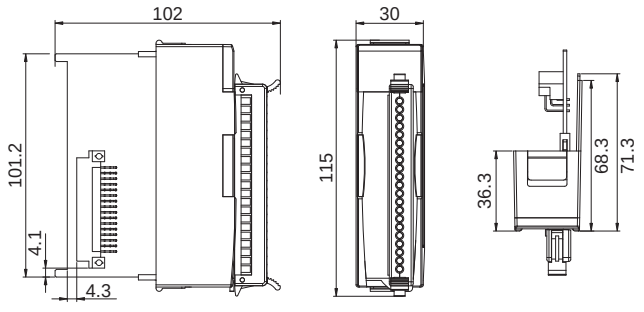
Analog Input		
Channels		6
Wiring		Differential
Range		±150 mV, ±500 mV, ±1 VDC , ±5 VDC, ±10 VDC, ±20 mA, (Jumper Selectable)
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Accuracy	Normal Mode	±0.1% of FSR
	Fast Mode	±0.5% or better
Sampling Rate	Normal Mode	10 Hz (Total)
	Fast Mode	60 Hz (Total)
Bandwidth	Normal Mode	15.7 Hz
	Fast Mode	78.7 Hz
Input Impedance		2 MΩ (Voltage), 125 Ω (Current)
Common Mode Rejection		86 dB Min.
Normal Mode Rejection		100 dB
Overvoltage Protection		240 Vrms
Individual Channel Configuration		Yes
Analog Output		
Channels		2
Range		+0 ~ +5 VDC, +0 ~ +10 VDC, ±5 VDC, ±10 VDC, +0 ~ +20 mA, +4 ~ +20 mA (Jumper Selectable)
Resolution		12-bit
Accuracy		±0.1% of FSR
Output Capacity		10 V @ 20 mA
Current Load Resistance		500 Ω
Power-on and Safe Values		Yes
Open Wire Detection for Current Output		Yes, Only +4 ~ +20 mA.
Digital Input		
Channels		2
Type		Wet
Sink/Source (NPN/PNP)		Sink
ON Voltage Level		+3.5 VDC ~ 50 VDC
OFF Voltage Level		+1 VDC Max.
Input Impedance		10 kΩ, 0.66 W
Counters	Channels	2
	Max. Count	32-bit
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Overvoltage Protection		70 VDC
Channel-to-Channel Isolation		Yes
Digital Output		
Channels		2
Type		Open Collector
Sink/Source (NPN/PNP)		Sink
Load Voltage		+3.5 VDC ~ +50 VDC
Max. Load Current		700 mA/channel
Overvoltage Protection		60 VDC
Overload Protection		Yes
Short Circuit Protection		Yes
Power-on and Safe Values		Yes

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Internal I/O Structure



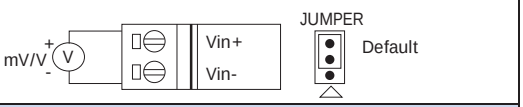
Dimensions (Units: mm)



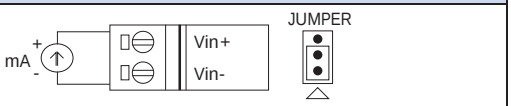
Left View | Front View | Top View

Wire Connections

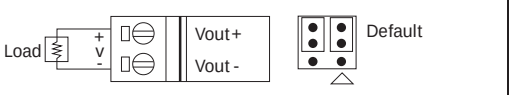
Voltage Input



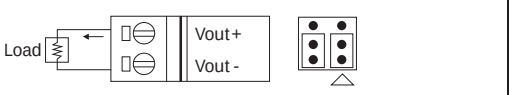
Current Input

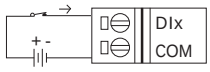
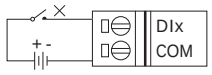
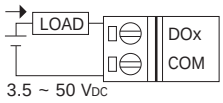
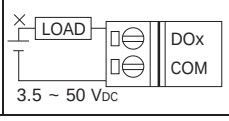


Voltage Output

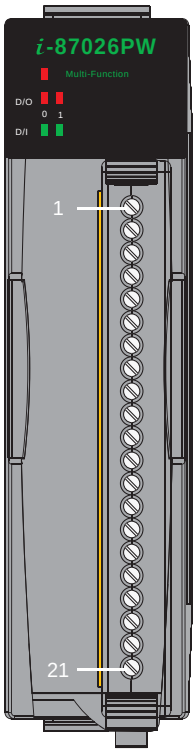


Current Output



Digital Input/ Counter	ON State Readback as 1	OFF State Readback as 0
Wet Contact (Sink)		
Digital Output	**ON State Readback as 1**	**OFF State Readback as 0**
Open Collector (Sink)		

Pin Assignments



Terminal No.	Pin Assignment
01	Vin0+
02	Vin0-
03	Vin1+
04	Vin1-
05	Vin2+
06	Vin2-
07	Vin3+
08	Vin3-
09	Vin4+
10	Vin4-
11	Vin5+
12	Vin5-
13	Vout0+
14	Vout0-
15	Vout1+
16	Vout2-
17	DO0
18	DO1
19	DI0
20	DI1
21	COM

Ordering Information

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

Accessories

 SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)

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