



I-87022W-G

2-channel Analog Output Module

Introduction

The I-87022W is a Sink Type Analog Output Module that includes 2 Analog Output channels, and provides options for configuring power-on and safe values. It also provides a programmable Analog output range (0 ~ +10 V, +4 ~ +20 mA or 0 ~ +20 mA), and each Analog Output can be configured for an individual range. The module provides an RF immunity level matching that defined in the IEC 61000-4-3 standard. Voltage or current output is jumper selectable, and the module also features per-channel open wire detection for +4 ~ +20 mA output, together with ±4 KV ESD protection and 3000 Vdc intra-module isolation.

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 Indicators	Yes, 1 as Power/Communication Indicator
I/O LED Indicators	-
Isolation	
Intra-module Isolation, Field-to-Logic	3000 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
	±8 kV Air for Random Point
RS Immunity (IEC 61000-4-3)	3 V/m, 80 MHz ~ 1 GHz
Power	
Power Consumption	1.8 W Max.
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

Features

- 2-channel Voltage or Current Output
- Individual Channel Configuration
- 3000 Vdc Intra-module Isolation
- 3 kV Channel-to-Channel Isolation
- Open Wire Detection for Current Output
- Readback Voltage or Current
- RF Immunity
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- 4 kV ESD Protection
- Wide Operating Temperature Range: -25 to +75°C



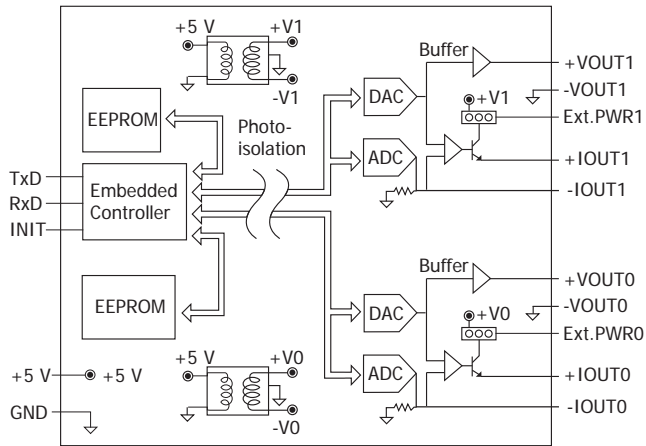
Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

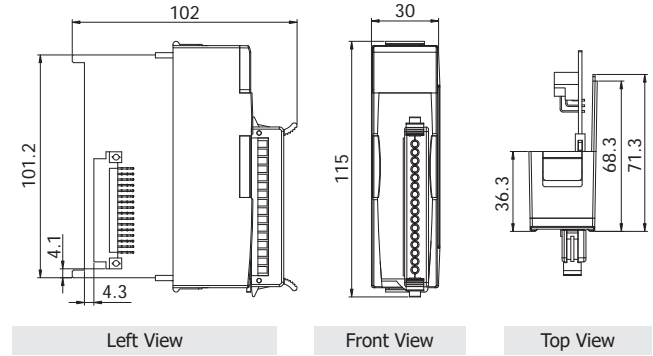
I/O Specifications

Analog Output		
Channels	2	
Current Output Wiring	Sink	
Range	0 ~ +10 V 0 ~ +20 mA +4 ~ +20 mA	
Resolution	12-bit	
Accuracy	±0.1% of FSR	
Readback Accuracy	±0.5% of FSR	
DA Output Response Time	10 ms for all Channel	
Programmable Output Slope	Voltage	0.0625 ~ 1024.0 V/Second
	Current	0.125 ~ 2048 mA/Second
Current Load Resistance	Internal Power: 500 Ω	
	External Power: 1050 Ω	
Voltage Output Capability	10 V @ 10 mA	
Channel-to-Channel Isolation	Yes, 3 kV	
Open Wire Detection	Yes, +4 ~ +20 mA	
Short Circuit Protection	Yes	
Power-on Value	Yes	
Safe Value	Yes	

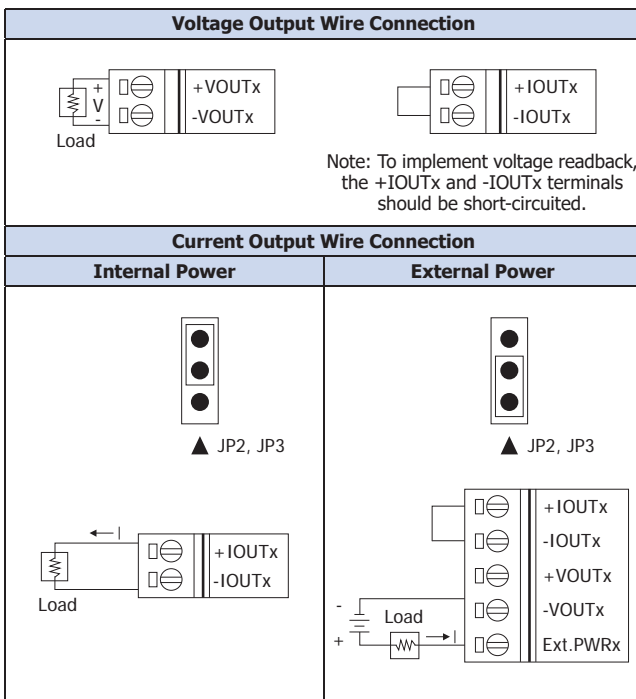
Internal I/O Structure



Dimensions (Units: mm)

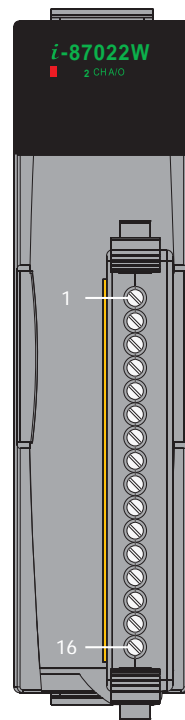


Wire Connections



Note: To implement voltage readback, the +IOUTx and -IOUTx terminals should be short-circuited.

Pin Assignments




Terminal No.	Pin Assignment
01	N/A
02	N/A
03	N/A
04	N/A
05	N/A
06	N/A
07	VOUT0+
08	VOUT0-
09	IOUT0+
10	IOUT0-
11	EXT.PWR0
12	VOUT1+
13	VOUT1-
14	IOUT1+
15	IOUT1-
16	EXT.PWR1

Ordering Information

I-87022W-G CR	2-channel 12-bit Analog Output Module with Channel-to-Channel Isolation (Gray Cover) (RoHS)
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Accessories

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