



Analog Input

RS-485 Remote I/O Modules



I-87024W

I-87024RW

4-channel 14-bit Analog Output Module

Introduction

The I-87024W is a 4-channel analog output module that provides either current or voltage output. There are options to set Power-on and safe values. The I-87024W also features 4 kV ESD protection and 3000 VDC intra-module isolation.

The I-87024RW is a 4-channel analog output module. The programmable AO channels provide 14-bit resolution and support an output range of 0 ~ +5 V, ±5 V, 0 ~ +10 V, ±10 V, 0 ~ +20 mA, or +4 ~ +20 mA. The I-87024RW has the same specifications as the I-87024W, but the output quality is improved in a harsh environments.

System Specifications

Model	I-87024W	I-87024RW	
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 Indicator	1 LED as Power/Communication Indicator		
I/O LED Indicator	-		
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		
Power			
Power Consumption	Typical	1.3 W Max.	1.1 W Max.
	Maximum	2.8 W (4-channels Output, 20 mA at 10 V)	3.2 W (4-channel Output, 20 mA at 10 V)
Mechanical			
Dimensions (W x L x H)	30 mm x 102 mm x 115 mm		
Environment			
Operating Temperature	-25 to +75°C		
Storage Temperature	-40 to +85°C		
Humidity	10 to 95% RH, Non-condensing		

Features

- Current Output or Voltage Output
- Power-on Value
- Safe Value
- 4 kV ESD Protection
- 3000 Vdc Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 to +75°C



Applications

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

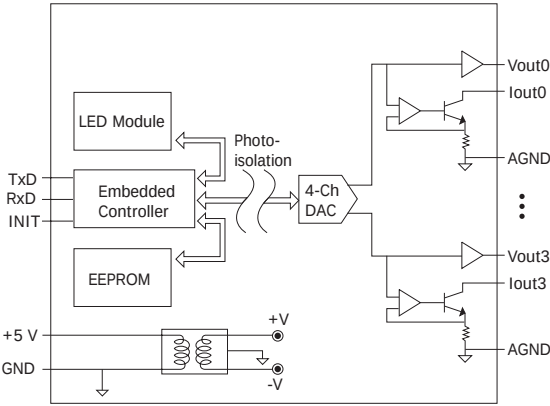
I/O Specifications

Model	I-87024W	I-87024RW
Analog Output		
Channels	4	
Current Output Wiring	Sink	
Range	0 ~ +5 Vdc, ±5 Vdc, 0 ~ +10 Vdc, ±10 Vdc, 0 ~ +20 mA, +4 ~ +20 mA	
Resolution	14-bit	
Accuracy	±0.1% of FSR	
Zero Drift	Voltage	±30 µV/°C
	Current	±0.2 µA/°C
Span Drift	±20 ppm/°C	
Analog Output Response Time	10 ms per channel	
Programmable Output Slope	0.125 to 2048 mA/second	
	0.0625 to 1024 V/second	
Output Capacity	Voltage	10 Vdc @ 5 mA
	Current	External +24 Vdc @ 1050 Ω
Open Wire Detection	-	
Short Circuit Protection	Yes	
Power-on Value	Yes	
Safe Value	Yes	

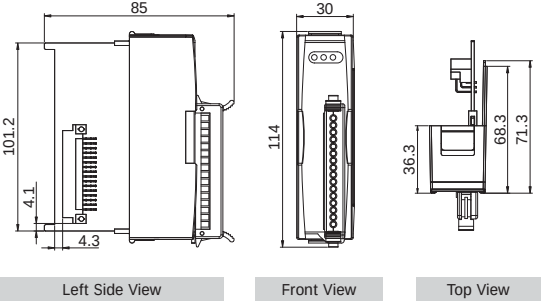
I-87KW Series

I-87024W/I-87024RW

Internal I/O Structure

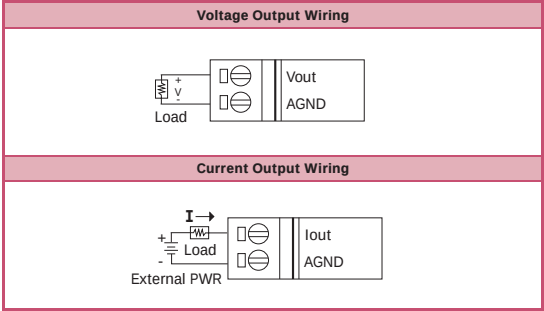


Dimensions (Units: mm)

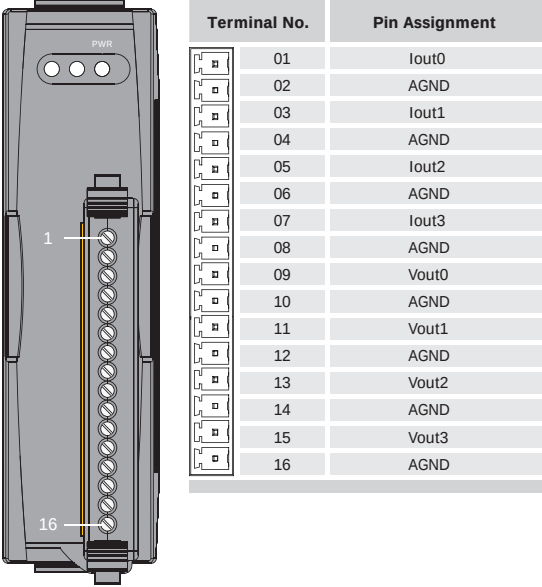


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Wire Connections



Pin Assignments



I-87KW Series

Ordering Information

I-87024W-G CR	4-channel 14-bit Analog Output Module (Gray Cover) (RoHS)
I-87024RW-G CR	4-channel 14-bit Analog Output Module with RF Immunity (Gray Cover) (RoHS)

Accessories

 SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)
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I-87024W/I-87024RW