



## I-87024W | I-87024RW

8-channel Isolated Digital Input Module with 16-bit Counter

### Features

- Current Output or Voltage Output
- Power-on Value
- Safe Value
- Dual Watchdog Timer
- Short Circuit Protection
- 3000 VDC Intra-module Isolation
- 4 kV ESD Protection



### 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	
<b>COM Port</b>			
Ports	RS-485		
Data Format	N, 8, 1		
Baud Rate	1200 ~ 115200 bps		
Protocol	DCON		
<b>CPU Module</b>			
Dual Watchdog Timer	Module (1.6 Seconds), Communication (Programmable)		
<b>LED Indicators</b>			
System LED Indicator	1		
<b>Isolation</b>			
Intra-module Isolation, Field-to-Logic	3000 VDC		
<b>EMS Protection</b>			
ESD (IEC 61000-4-2)	±4 kV Contact for Each port, ±8 kV Air for Random Point		
<b>Power</b>			
Consumption	Typical	0.3 W Max.	1.1 W Max.
	Maximum	2.8 W (4-ch Output, 20 mA at 10 V)	3.2 W (4-ch Output, 20 mA at 10 V)
<b>Mechanical</b>			
Dimensions (W x L x H)	114 mm x 30 mm x 85 mm		
<b>Environment</b>			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 95 % RH, Non-condensing		

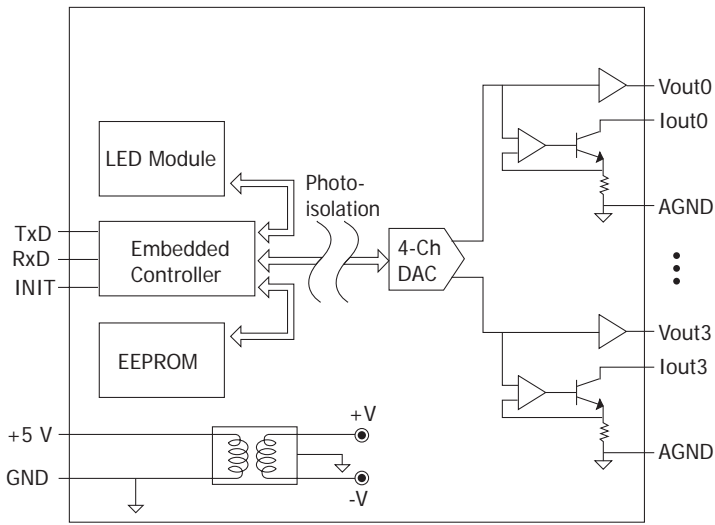
### I/O Specifications

Model	I-87024W	I-87024RW
<b>Analog Output</b>		
Channels	4	
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
Short Circuit Protection	Yes	
Power-on Value	Yes	
Safe Value	Yes	

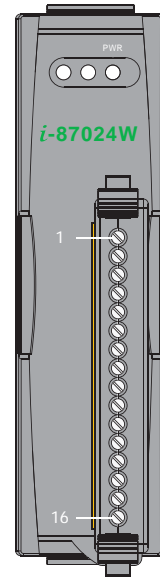
### Applications

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

## Internal I/O Structure

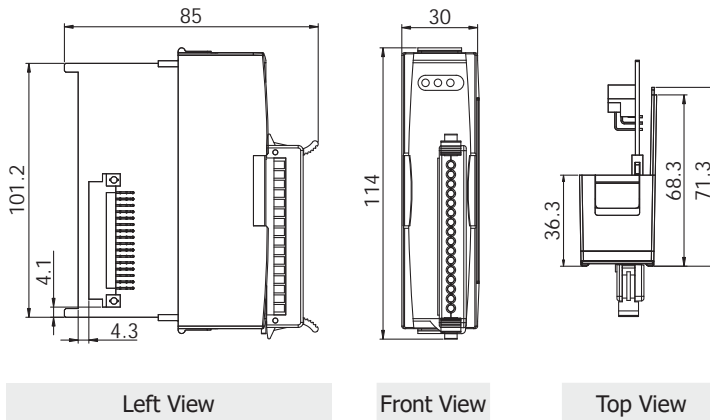


## Pin Assignments

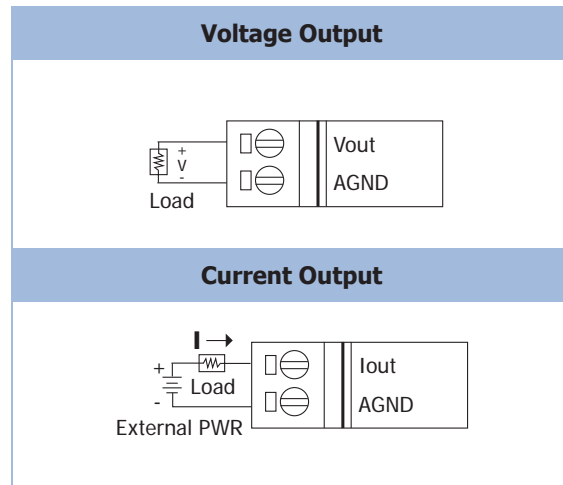


Terminal No.	Pin Assignment
01	Iout0
02	AGND
03	Iout1
04	AGND
05	Iout2
06	AGND
07	Iout3
08	AGND
09	Vout0
10	AGND
11	Vout1
12	AGND
13	Vout2
14	AGND
15	Vout3
16	AGND

## Dimensions (Unit: mm)



## Wire Connections



## Accessories



**SG-770 CR** 7/14-channel Different/Single-ended Surge Protector (RoHS)

## Ordering Information

<b>I-87024W-G CR</b>	4-channel 14-bit Analog Output Module (RoHS)
<b>I-87024RW-G CR</b>	4-channel 14-bit Analog Output Module with RF Immunity (RoHS)