



I-87022

I-87022-G

2-ch Isolated AO Module

Features

- 2-channel Analog Output
- Software Selectable Current or Voltage Output
- Power-on Value Setting
- Safe Value Setting
- Open Wire Detection for Current Output
- Readback Voltage or Current
- 2 kV Channel to Channel Isolation
- 3000 V_{DC} Intra-module Isolation
- Programmable Output Slope
- Dual Watchdog



Introduction

The I-87022 is a 12-bit, 2-channel Analog Output module that is designed for both voltage and current output using the DCON protocol. The I-87022 features 3000 V_{DC} intra-module isolation, and the power source for the current output can be selected as either internal or external via a jumper. Options are also provided to allow power-on and safe values to be set.

Applications

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

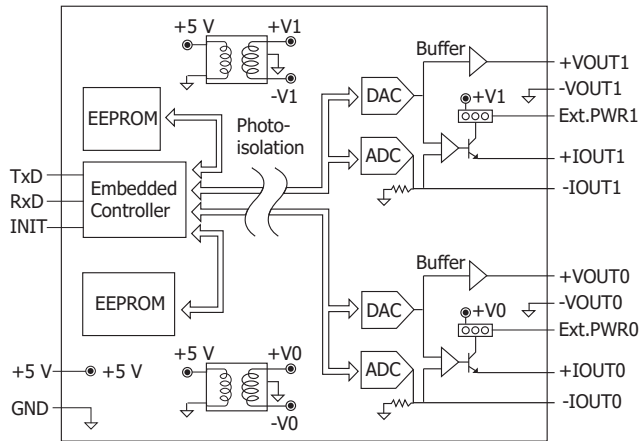
System Specifications

CPU Module	
Watchdog Timer	Yes, Module (1.6 Seconds), Communication (Programmable)
Isolation	
Intra-module Isolation	3000 V _{DC}
LED Indicators	
Status	1 x Power and Communication
COM Ports	
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	DCON
Power	
Power Consumption	2.5 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 116 mm x 88 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +75 °C
Humidity	5 ~ 95% RH, Non-condensing

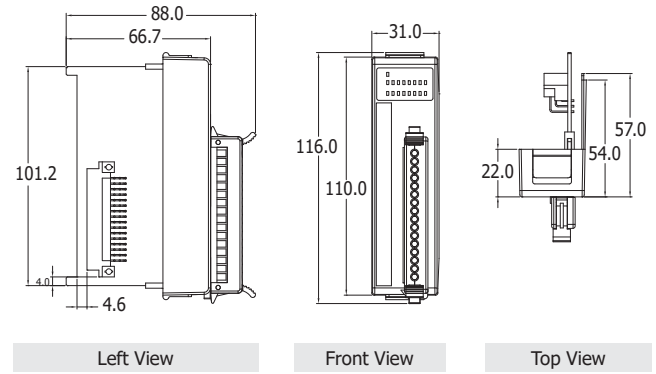
I/O Specifications

Analog Output		
Channels	2	
Type	Voltage Current	
Range	0 ~ +10 V 0 ~ +20 mA +4 ~ +20 mA	
Resolution	12-bit	
Accuracy	±0.1% of FSR	
Short Circuit Protection	Yes	
DA Output Response Time	10 ms per Channel	
Programmable Output Slope	Voltage	0.0625 ~ 1024 V/Second
	Current	0.125 ~ 2048 mA/Second
Open Wire Detection	Yes, +4 ~ +20 mA	
Readback Accuracy	±0.5% of FSR	
Voltage Output Capability	10 V @ 10 mA	
Current Load Resistance	Internal Power:	500 Ω
	External Power:	1050 Ω
Channel-to-Channel Isolation	Yes, 3 kV	
Power-on Value	Yes	
Safe Value	Yes	

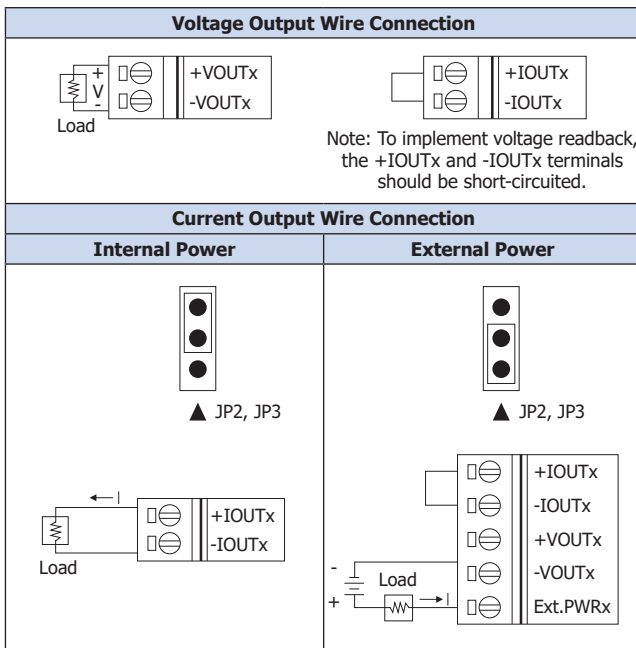
Internal I/O Structure



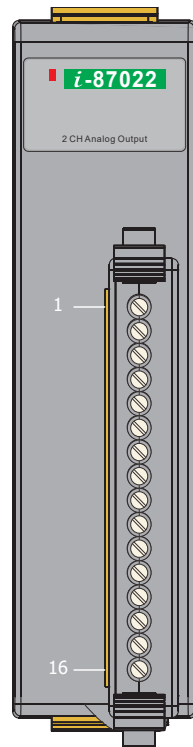
Dimensions (Units: mm)



Wire Connections



Pin Assignments



Terminal No.	Pin Assignment
01	-
02	-
03	-
04	-
05	-
06	-
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-87022 CR	2-ch, 12-bit Channel-to-ch Isolated AO Module (Blue Cover) (RoHS)
I-87022-G CR	2-ch, 12-bit Channel-to-ch Isolated AO Module (Gray Cover) (RoHS)