

## Features

- 4-/8-channel Voltage or Current Output
- Individual Channel Configuration
- Short Circuit Protection
- Power-on Value
- Safe Value
- 4 kV ESD Protection
- 3000 VDC Intra-module Isolation
- Wide Operating Temperature Range: -25 to +75°C



## Introduction

The I-9024U and I-9028U are source type analog output modules, offering 4 and 8 single-ended analog output channels. Each channel can be programmed to an individual output range of 0 ~ 5 V, ±5 V, 0 ~ 10 V, ±10 V, +4 ~ +20 mA or 0 ~ +20 mA. Open wire detection is provided for +4 ~ +20 mA output. Options for configuring power-on and safe values are included, together with qualification for 4 kV ESD protection as well as 3000 VDC intra-module isolation.

## Applications

- Data Acquisition System
- Process Monitoring and Control
- Vibration Analysis
- Factory Automation

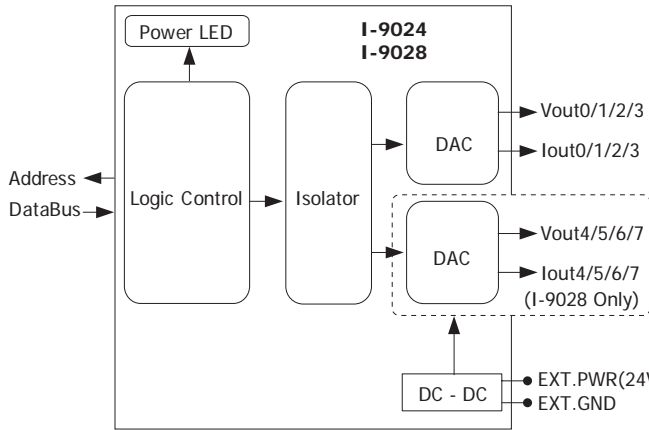
## System Specifications

Model	I-9024U	I-9028U
<b>LED Indicators/Display</b>		
System LED Indicator	1 LED as Power Indicator	
I/O LED Indicator	-	
<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 Terminal	
	±8 kV Air for Random Point	
<b>Power</b>		
Power Consumption	2 W Max.	
<b>Mechanical</b>		
Dimensions (L x W x H)	144 mm x 30.3 mm x 134 mm	
<b>Environment</b>		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-40 ~ +85°C	
Humidity	10 ~ 90% RH, Non-condensing	

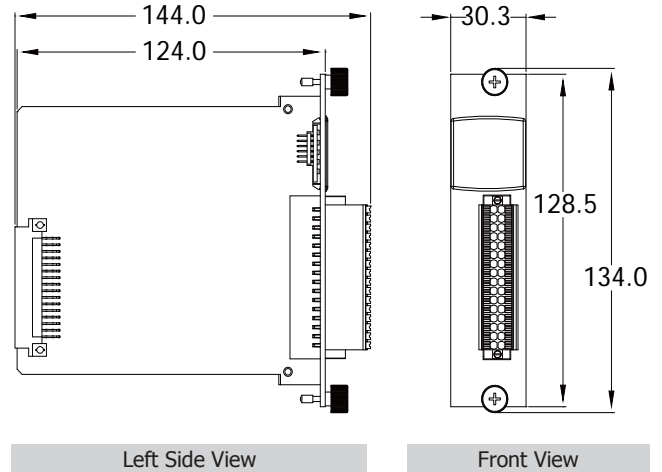
## I/O Specifications

Model	I-9024U	I-9028U
<b>Analog Output</b>		
Channels	4	8
Current Output Wiring	Source	
Range	0 ~ +5 VDC, ±5 VDC, 0 ~ +10 VDC, ±10 VDC, 0 ~ +20 mA, +4 ~ +20 mA	
Resolution	16-bit	
Accuracy	±6 LSB	
Zero Drift	±0.2 μV/°C	
Span Drift	±25 ppm/°C	
Short Circuit Protection	Yes	
Power-on Value	Yes	
Safe Value	Yes	
<b>External Power Requirements</b>		
Reverse Polarity Protection	Yes	
Powered from Terminal Block	Yes, 15 ~ 30 VDC	
Isolation	3000 VDC	

### Internal I/O Structure



### Dimensions (Units: mm)



### Pin Assignments

**I-9024U**

Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
Vout0	01	17	Vout1
Iout0	02	18	Iout1
AGND	03	19	AGND
Vout2	04	20	Vout3
Iout2	05	21	Iout3
AGND	06	22	AGND
-	07	23	-
-	08	24	-
-	09	25	-
-	10	26	-
-	11	27	-
-	12	28	-
EXT.PWR	13	29	EXT.PWR
EXT.PWR	14	30	EXT.PWR
EXT.GND	15	31	EXT.GND
EXT.GND	16	32	EXT.GND

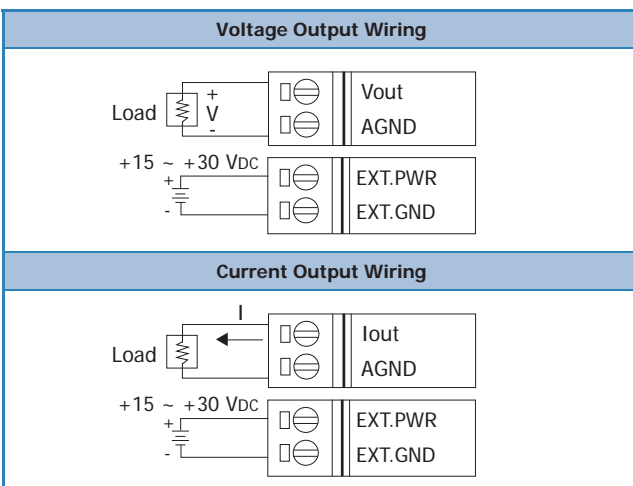
32-pin Connector

**I-9028U**

Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
Vout0	01	17	Vout1
Iout0	02	18	Iout1
AGND	03	19	AGND
Vout2	04	20	Vout3
Iout2	05	21	Iout3
AGND	06	22	AGND
Vout4	07	23	Vout5
Iout4	08	24	Iout5
AGND	09	25	AGND
Vout6	10	26	Vout7
Iout6	11	27	Iout7
AGND	12	28	AGND
EXT.PWR	13	29	EXT.PWR
EXT.PWR	14	30	EXT.PWR
EXT.GND	15	31	EXT.GND
EXT.GND	16	32	EXT.GND

32-pin Connector


### Wire Connections



### Ordering Information

<b>I-9024U CR</b>	4-channel Isolated Analog Output Module (RoHS)
<b>I-9028U CR</b>	8-channel Isolated Analog Output Module (RoHS)

### Accessories

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