



I-97024U | I-97028U

4 Channel Isolated Analog Output Module

8 Channel Isolated Analog Output Module

Features

- 4/8 Channel Voltage/Current Output
- Source Current Output Wiring
- Individual Channel Configuration
- Short Circuit Protection
- Power-on Value
- Safe Value
- 4 kV ESD Protection
- 3000 VDC Intra-module Isolation

Introduction

The I-97024U and I-97028U are source type analog output modules, which off er 4 and 8 single-ended analog output channels. Every channel can be programmed to an individual output range of 0 to 5 V, ±5 V, 0 to 10 V, ±10 V, +4 to +20 mA or 0 to +20 mA. Open wire detection is provided for +4 to +20 mA output. Options for confi guring power-on and safe values are also included.

The I-97024U and I-97028U provide RF immunity level matching that defi ned by IEC 61000-4-3 standard, together with 4 kV ESDprotection as well as 3000 VDC intra-module isolation.

System Specifications

Model	I-97024U	I-97028U
LED Display		
Status	1 x Power/Communication 8 x Analog Output Fault	
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		
Consumption	4 W Max.	
Reverse Polarity Protection	Yes	
Powered from Terminal Block	15 ~ 30 VDC	
Mechanical		
Dimensions (W x L x H)	31 mm x 134 mm x 144 mm	
Environment		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-40 ~ +85 °C	
Humidity	10 ~ 90 % RH, Non-condensing	

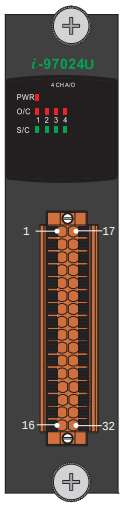
I/O Specifications

Model	I-97024U	I-97028U
Analog Output		
Channels	4	8
Current Output Wiring	Source	
Resolution	16-bit	
Range	0 ~ +5 VDC、±5 VDC、0 ~ +10 VDC、±10 VDC、0 ~ +20 mA、+4 ~ +20 mA	
Accuracy	±0.02 % of FSR	
Zero Drift	±0.2 μV/°C	
Span Drift	±25 ppm/°C	
Short Circuit Protection	Yes	
Response Time	10 ms per channel	
Programmable Output Slope	Voltage: 0.0625 ~ 512 V/Second Current: 0.125 ~ 1024 mA/Second	
Open Wire Detection	+4 ~ +20 mA	
Voltage Output Capability	1000 Ω	
Power-on Value	Yes	
Safe Value	Yes	
COM Ports		
Ports	1 x RS-485	
Baud Rate	1200 ~ 115200 bps	
Data Format	N, 8, 1	
Protocol	DCON	

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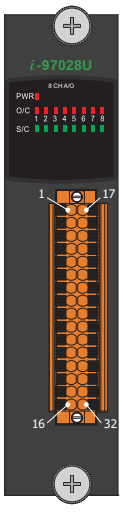
Pin Assignments

I-97024U



Pin Assignment		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

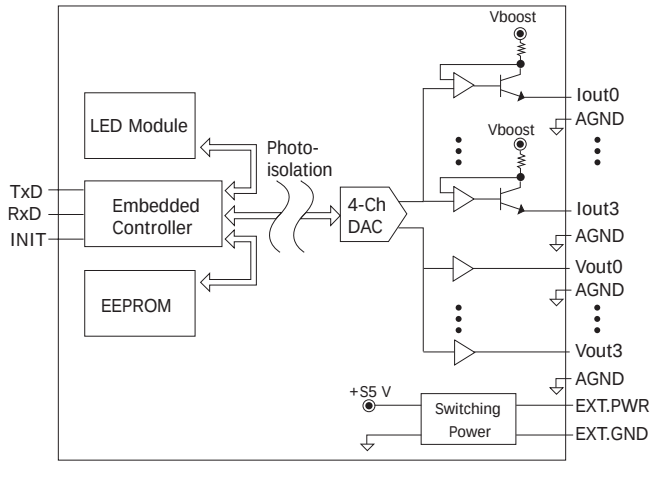
I-97028U



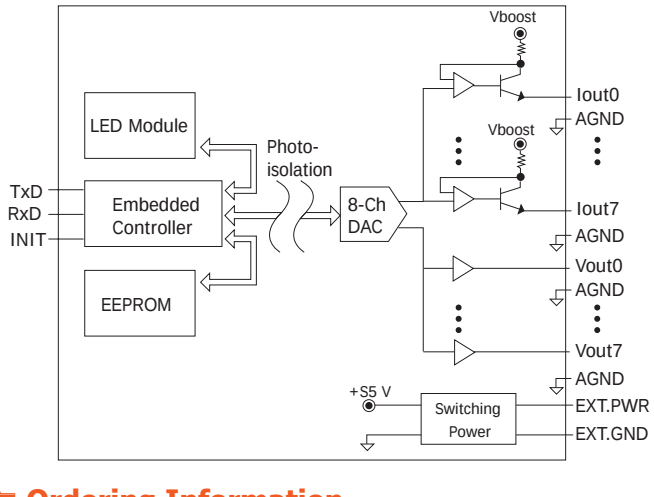
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AGND	03		19	AGND
Vout2	04		20	Vout3
Iout2	05		21	Iout3
AGND	06		22	AGND
Vout4	07		23	Vout5
Iout4	08		24	Iout5
AGND	09		25	AGND
Vout6	10		26	Vout7
Iout6	11		27	Iout7
AGND	12		28	AGND
EXT.PWR	13		29	EXT.PWR
EXT.PWR	14		30	EXT.PWR
EXT.GND	15		31	EXT.GND
EXT.GND	16		32	EXT.GND

Internal I/O Structure

I-97024U

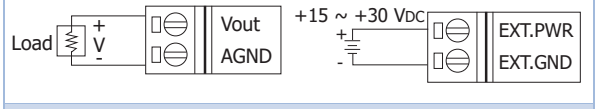


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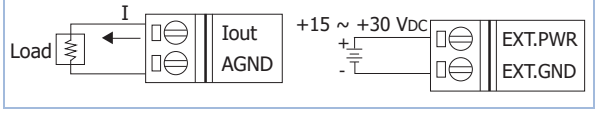


Wire Connections

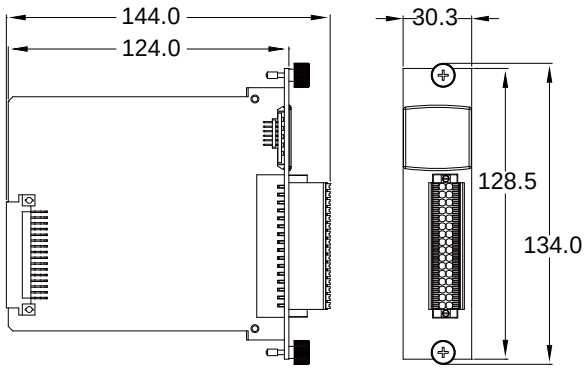
Voltage Output Wiring



Current Output Wiring



Dimensions (Units: mm)



Left View | Front View

Accessories

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

Ordering Information

I-97024U CR	4-ch Isolated Analog Output Module (RoHS)
I-97028U CR	8-ch Isolated Analog Output Module (RoHS)

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