

I-97024U

4-channel Isolated Voltage or Current Output Module

I-97028U

8-channel Isolated Voltage or Current Output Module

Features

- 4-/8-channel Voltage or Current Output
- Individual Channel Configuration
- Open Wire Detection for Current Output
- RF Immunity
- 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-97024U and I-97028U are source type analog output modules, which offer 4 and 8 single-ended analog output channels. Every 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 also included.

The I-97024U and I-97028U provide RF immunity level matching that defined by IEC 61000-4-3 standard, together with 4 kV ESD protection as well as 3000 Vdc intra-module isolation

Applications

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

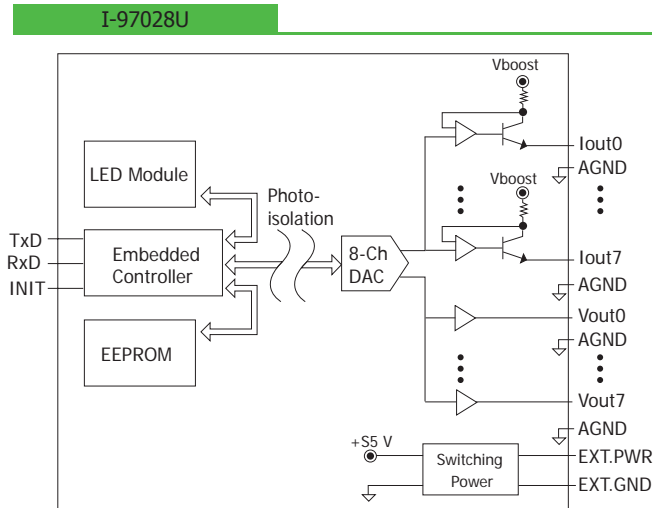
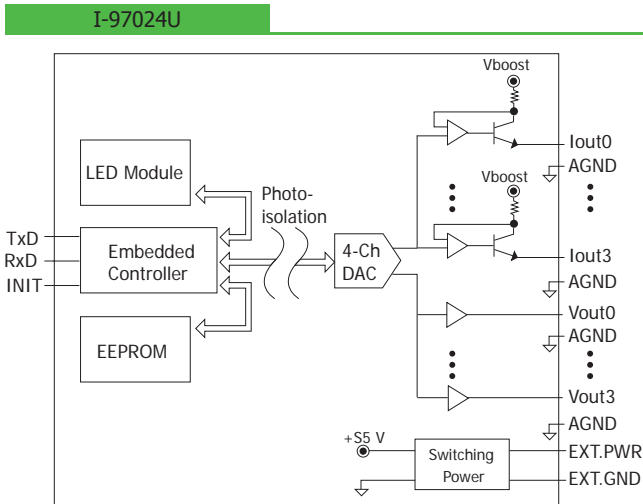
System Specifications

Model	I-97024U	I-97028U
Communication		
Interface	RS-485	
Format	N, 8, 1	
Baud Rate	1200 ~ 115200 bps	
Protocol	DCON	
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)	
LED Indicators/Display		
System LED Indicator	1 LED as Power Indicator	
I/O LED Indicator	8 LEDs as Analog Output Fault Indications	16 LEDs as Analog Output Fault Indications
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		
Power Consumption	0.3 W Max.	
Mechanical		
Dimensions (L x W x H)	144 mm x 30.3 mm x 134 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	
Range	0 ~ +5 VDC, ±5 VDC, 0 ~ +10 VDC, ±10 VDC, 0 ~ +20 mA, +4 ~ +20 mA	
Resolution	16-bit	
Accuracy	±0.02% of FSR	
Zero Drift	±0.2 µV/°C	
Span Drift	±25 ppm/°C	
DA Output Response Time	10 ms per channel	
Programmable Output Slope	Voltage	0.0625 ~ 512 V/Second
	Current	0.125 ~ 1024 mA/Second
Output Capacity	1000 Ω	
Open Wire Detection	Yes, +4 ~ +20 mA	
Short Circuit Protection	Yes	
Power-on Value	Yes	
Safe Value	Yes	
External Power Requirements		
Reverse Polarity Protection	Yes	
Powered from Terminal Block	Yes, 15 ~ 30 VDC	
Consumption	4 W	7 W

Internal I/O Structure

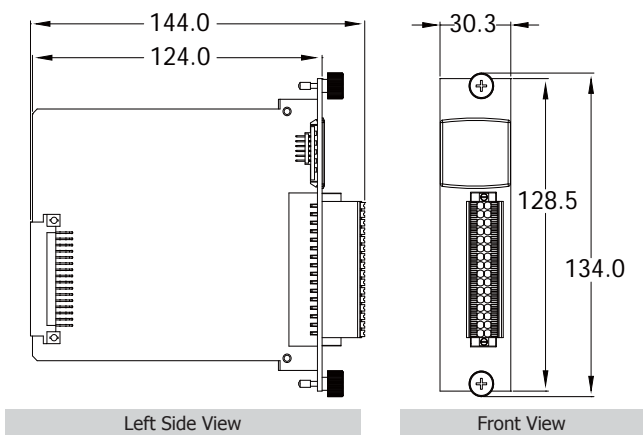


Pin Assignments

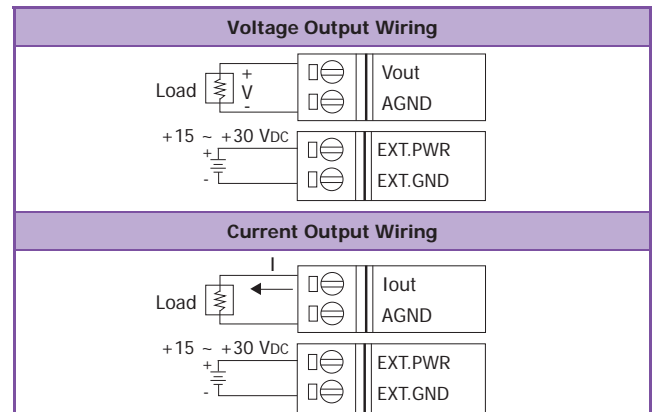
Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
Vout0	01	17	Vout1
Iout0	02	18	Iout1
AGND	03	19	AGND
Vout2	04	20	Vout3
Iout2	05	21	Iout3
AGND	06	22	AGND
-	07	23	-
-	08	24	-
-	09	25	-
-	10	26	-
-	11	27	-
-	12	28	-
EXT.PWR	13	29	EXT.PWR
EXT.PWR	14	30	EXT.PWR
EXT.GND	15	31	EXT.GND
EXT.GND	16	32	EXT.GND

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Vout0	01	17	Vout1
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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

Dimensions (Units: mm)



Wire Connections



Accessories

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

I-97024U-G CR	4-channel 16-bit Isolated Source Type Voltage or Current Output Module (Gray Cover) (RoHS)
I-97028U-G CR	8-channel 16-bit Isolated Source Type Voltage or Current Output Module (Gray Cover) (RoHS)