# I-8024W

4 Channel Isolated Voltage/Current Output Module

## Features

- 4 Channel Voltage/Current Output
- Sink Current Output Wiring
- Individual Channel Configuration
- 4 kV ESD Protection
- 3000 VDC Intra-module Isolation

## Introduction

The I-8024W is a 14-bit Analog Output Module, which offers 4 single-ended analog output channels. Each channel can be programmed to an individual output range of ±10 VDC or 0 ~ +20 mA. The I-8024W provides 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.

## Application

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

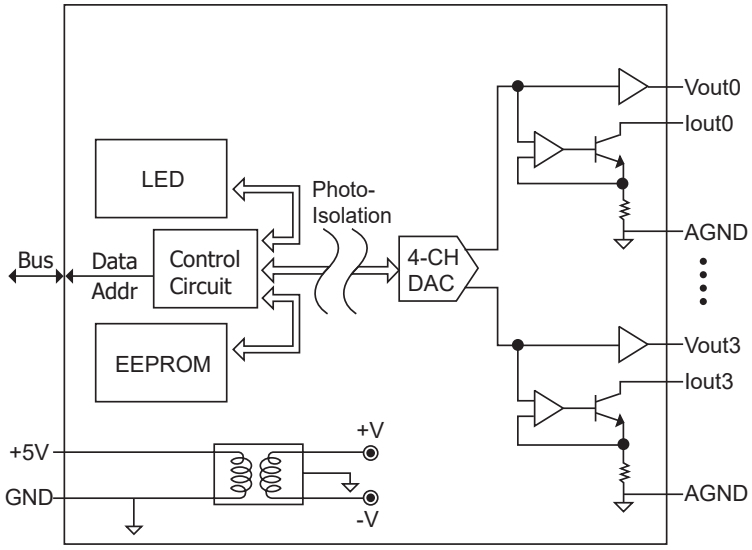
## System Specifications

| Model | I-8024W |
|---|---|
| **LED Display** | |
| System LED Indicator | 1 LED as Power Indicator |
| **Isolation** | |
| Intra-module Isolation, Field-to-Logic | 3000 VDC |
| **EMS Protection** | |
| ESD (IEC 61000-4-2) | ±4 kV Contact for each Terminal |
| **Power** | |
| Consumption | 2 W Max. |
| **Mechanical** | |
| Dimensions (W x L x H) | 31 mm x 129 mm x 114 mm |
| **Environment** | |
| Operating Temperature | -25 ~ +75 °C |
| Storage Temperature | -40 ~ +85 °C |
| Humidity | 10 ~ 90 % RH, Non-condensing |

## I/O Specifications

| Model | I-8024W |
|---|---|
| **Analog Output** | |
| Channels | 4 |
| Current Output Wiring | Sink |
| Resolution | 14-bit |
| Range | ±10 VDC, 0 ~ +20 mA |
| Accuracy | Voltage: ±0.1% of FSR<br>Current: ±0.2% of FSR |
| Zero Drift | Voltage: ±30 μV/ °C<br>Current: ±0.2 μA/ °C |
| Span Drift | ±20 ppm/°C |
| Response Time | 25 us per channel |
| Programmable Output Slope | Voltage: 0.72 V /us<br>Current: 0.107 mA /us |
| Readback Accuracy | ±1% of FSR |
| Voltage Output Capability | 10 VDC @ 20 mA |
| Current Load Resistance | External +24 VDC: 1050 Ω |
| **Isolation** | |
| Reverse Polarity Protection | Yes |
| Powered from Terminal Block | 15 ~ 30 VDC |
| Isolation | 3000 VDC |

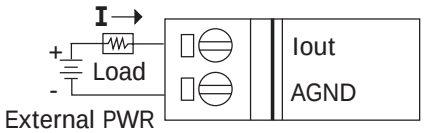
## Internal I/O Structure



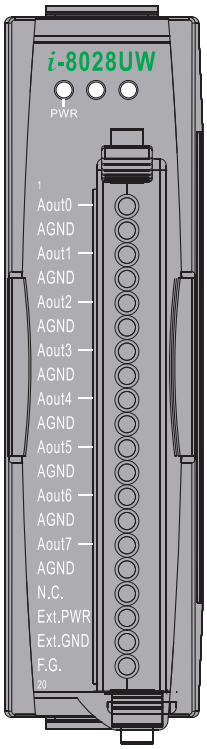

## Wire Connections

### Voltage Output Wiring

### Current Output Wiring

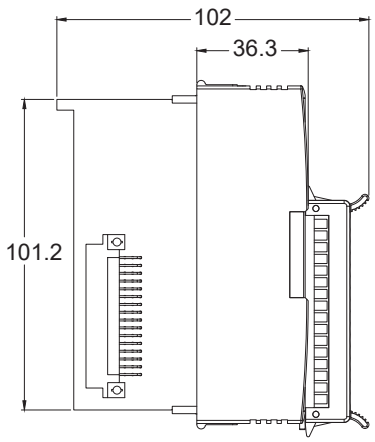



## Pin Assignments

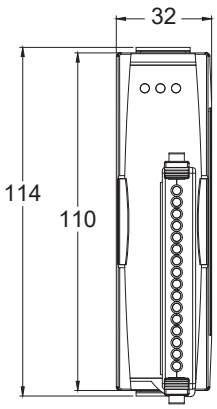



| Terminal No. | Pin Assignment |
|---|---|
| 01 | Iout0 |
| 02 | AGND |
| 03 | Iout1 |
| 04 | AGND |
| 05 | Iout2 |
| 06 | AGND |
| 07 | Iout3 |
| 08 | AGND |
| 09 | Vout0 |
| 10 | AGND |
| 11 | Vout1 |
| 12 | AGND |
| 13 | Vout2 |
| 14 | AGND |
| 15 | Vout3 |
| 16 | AGND |

## Dimensions (Units: mm)




Left View




Front View

## Ordering Information

| | |
|---|---|
| **I-8024W-G CR** | 4-channel Isolated Analog Output Module (RoHS) |