

# I-8048W

8-channel Non-Isolated Digital Input Module

## Features

- 8-Channel Digital Input
- Isolated or Non-isolated TTL Input Jumper Selectable
- Rising/Falling-edge Interrupts Programmable
- Dry and Wet Contact, Selectable via Wire Connections
- 4 kV ESD Protection
- Wide Operating Temperature Range: -25 ~ +75 °C

## Introduction

The I-8048W off er 8 channels for digital input, each of which features Photocouple-isolation protection. Either Sink Type or Source Type Input input can be selected via wire connections. All channels have 4 kV ESD protection and 1500 Vrms intra-module isolation.

## System Specifications

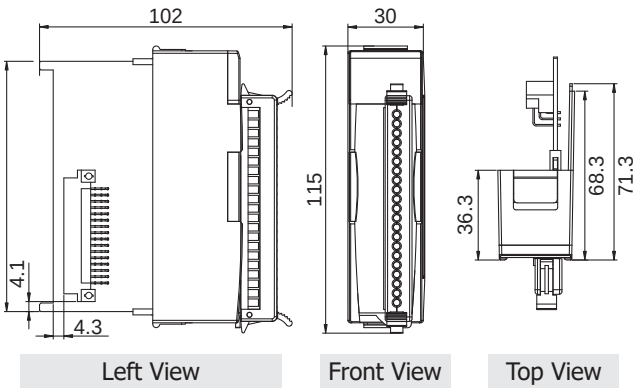
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| **LED Indicators** | |
| System LED Indicator | 1 LED as Power Indicator |
| I/O LED Indicator | 8 LEDs as I/O Status Indicator |
| **Isolation** | |
| Intra-module Isolation, Field-to-Logic | 1500 Vrms |
| **EMS Protection** | |
| ESD (IEC 61000-4-2) | ±4 kV Contact for each Terminal |
| **Power** | |
| Consumption | 1.75 W Max |
| **Mechanical** | |
| Dimensions (W x L x H) | 30 mm x 102 mm x 115 mm |
| **Environment** | |
| Operating Temperature | -25 ~ +75 °C |
| Storage Temperature | -30 ~ +85 °C |
| Humidity | 5 ~ 95 % RH, Non-condensing |

## I/O Specifications

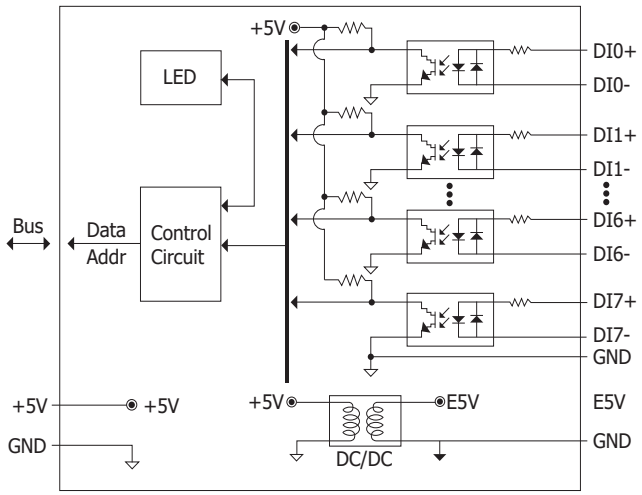
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| **Digital Input** | |
| Channels | 8 |
| Type | Dry Contact, Wet Contact |
| Sink/Source (NPN/PNP) | Sink/Source |
| ON Voltage Level | Isolated: 4 ~ 30 V, Non-isolated TTL: 0 ~ 0.8 V |
| OFF Voltage Level | Isolated: 0 ~ 1 V, Non-isolated TTL: 2 ~ 5 V |
| Interrupts | Yes. Trigger type: Rising/Falling edge programmable for each channel. Max. Interrupt Frequency: 10 kHz Max. |
| Input Impedance | 2.4 kΩ, 0.5 W |

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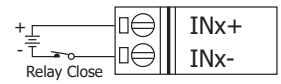
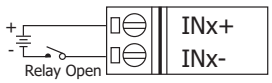
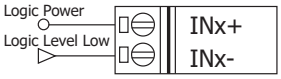
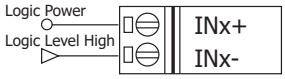
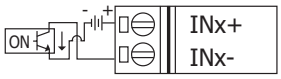
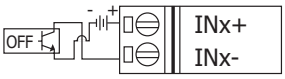
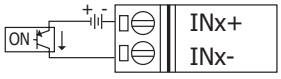
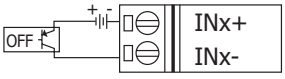
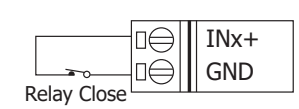
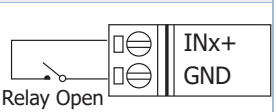
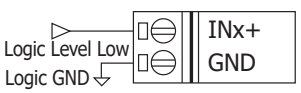
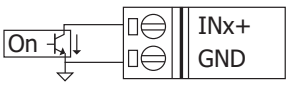
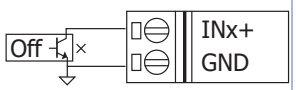
## Dimensions (Units: mm)



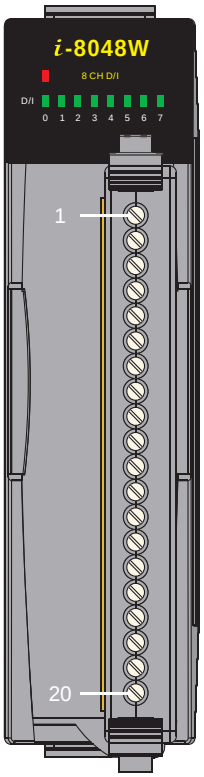

## Internal I/O Structure




## Wire Connections

| Input Type | ON State Readback as 0 | OFF State Readback as 1 |
|---|---|---|
| **Isolated** | | |
| Relay Contact | **Relay ON** | **Relay OFF** |
| |   |   |
| TTL/CMOS Logic | **Voltage < +4 V** | **Voltage > +4 V** |
| |   |   |
| NPN Output | **Open Collector ON** | **Open Collector OFF** |
| |   |   |
| PNP Output | **Open Collector ON** | **Open Collector OFF** |
| |   |   |
| Non-**Isolated** | | |
| Relay Contact | **Relay ON** | **Relay OFF** |
| |   |   |
| TTL/CMOS Logic | **Voltage < +4 V** | **Voltage > +4 V** |
| |   |   |
| Open Collector | **Open Collector ON** | **Open Collector OFF** |
| |   |   |

## Pin Assignments




| Terminal No. | Pin Assignment |
|---|---|
| 01 | GND |
| 02 | - |
| 03 | IN 0+ |
| 04 | IN 0- |
| 05 | IN 1+ |
| 06 | IN 1- |
| 07 | IN 2+ |
| 08 | IN 2- |
| 09 | IN3 + |
| 10 | IN 3- |
| 11 | IN 4 + |
| 12 | IN 4- |
| 13 | IN 5+ |
| 14 | IN 5- |
| 15 | IN 6+ |
| 16 | IN 6- |
| 17 | IN 7+ |
| 18 | IN 7- |
| 19 | E5V |
| 20 | EGND |

## Ordering Information

| | |
|---|---|
| **I-8048W-G CR** | 8-Channel Non-Isolated Digital Input Module (RoHS) |

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