



I-8054W-G

8-channel Isolated Digital Input and
8-channel Isolated Digital Output Module

Features

- 8-channel Isolated Digital Input and 8-channel Isolated Digital Output
- Sink-type Digital Output Channels with Overload Protection
- Short-circuit and Overcurrent Protection
- 4 kV ESD Protection
- 3750 Vdc Intra-module Isolation
- Wide Operating Temperature Range: -25 ~ +75 °C



Introduction

The I-8054W module offers 8 Isolated Digital Input channels and 8 Isolated Digital Output channels. The I-8054W supports sink-type output with short circuit protection. The I-8054W includes 16 LED indicators that can be used to monitor the status of the Digital Input and Digital Output channels, and options are available for configuring both power-on and safe values. 4 kV ESD protection and 3750 Vdc intra-module isolation are provided as standard.

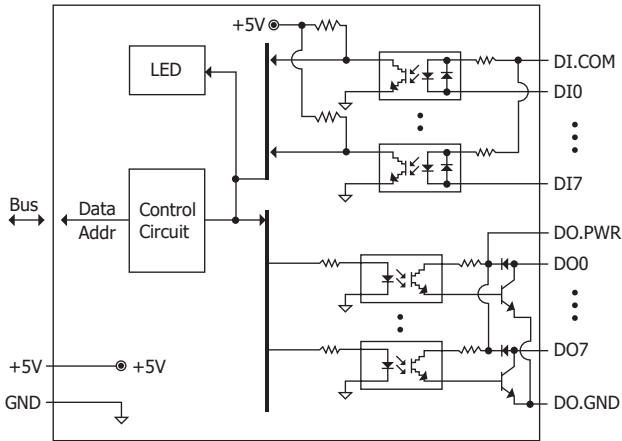
System Specifications

LED Indicators/Display	
System LED Indicators	1 LED as Power Indicator
I/O LED Indicators	16 LEDs as Digital Input & Digital Output Indicators
Isolation	
Intra-module Isolation, Field-to-Logic	3750 Vdc
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	0.55 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	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

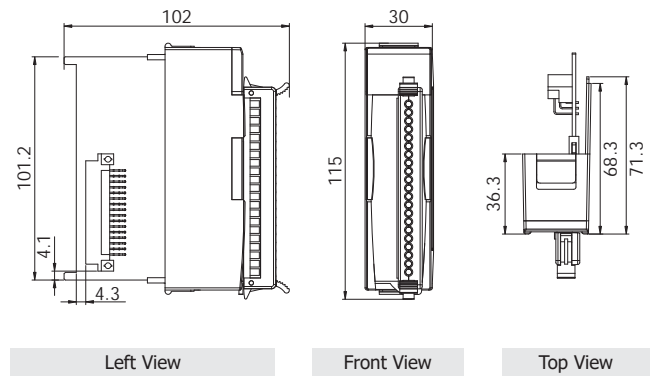
I/O Specifications

Digital Input	
Channels	8
Type	Wet Contact
Sink/Source	Sink, Source
ON Voltage Level	+10 ~ +50 Vdc
OFF Voltage Level	+4 Vdc max.
Input Impedance	10 kΩ, 0.5 W
Digital Output	
Channels	8
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+5 ~ +50 VDC
Max. Load Current	700 mA/Channel

Internal I/O Structure



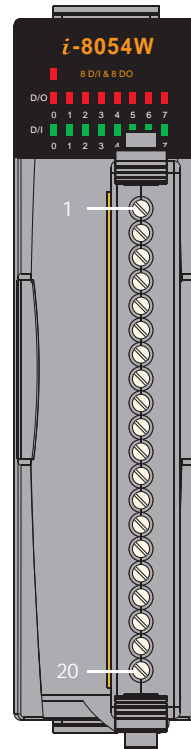
Dimensions (Units: mm)



Wire Connections

Input Type	ON State LED ON Readback as 0	OFF State LED OFF Readback as 1
Relay Contact	Relay ON	Relay OFF
TTL/CMOS Logic	Voltage > 10 V	Voltage < 4 V
NPN Output	Open Collector ON	Open Collector OFF
PNP Output	Open Collector ON	Open Collector OFF

Pin Assignments



Terminal No.	Pin Assignment
01	DI.COM
02	DI0
03	DI1
04	DI2
05	DI3
06	DI4
07	DI5
08	DI6
09	DI7
10	DO0
11	DO1
12	DO2
13	DO3
14	DO4
15	DO5
16	DO6
17	DO7
18	DO.GND
19	DO.GND
20	DO.PWR

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Drive Relay	Relay ON	Relay OFF
Resistance Load		

Ordering Information

I-8054W-G CR	8-channel Isolated Digital Input and 8-channel Isolated Digital Output Module (Gray Cover) (RoHS)
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