



I-8054W

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

Features

- 8-channel Isolated Digital Input and 8-channel Isolated Digital Output
- 3750 VDC Intra-module Isolation
- Each digital channel has its own status LED
- 4 kV ESD Protection
- 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.

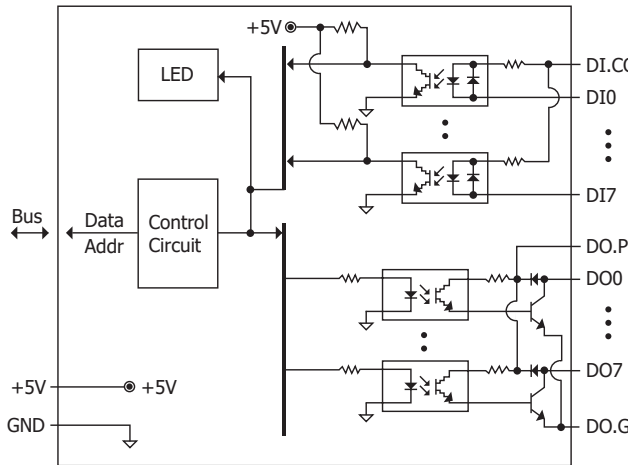
System Specifications

LED Indicators	
System LED Indicator	1 LED as Power Indicator
I/O LED Indicator	16 LEDs as I/O Status Indicator
Isolation	
Intra-module Isolation, Field-to-Logic	3750 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
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	-30 ~ +85 °C
Humidity	5 ~ 95 % RH, Non-condensing

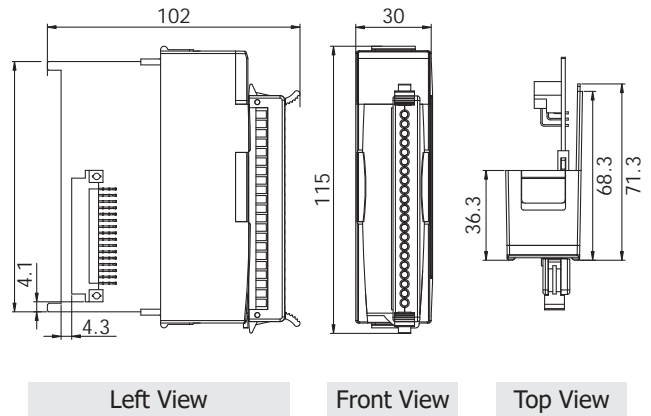
I/O Specifications

Digital Input	
Channels	8
Type	One Common for All Digital Inputs
Sink/Source (NPN/PNP)	Sink/Source
ON Voltage Level	+10 ~ 50 V
OFF Voltage Level	+4 V Max.
Input Impedance	10K Ohms, 0.5 W
Digital Output	
Channels	8
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+5 ~ +50 VDC
Load Current	700 mA/Channel

Internal I/O Structure



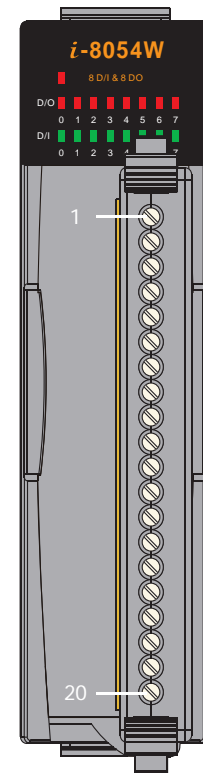
Dimensions (Units: mm)



Wire Connections

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

Ordering Information

I-8054W-G CR

8-channel Isolated Digital Input and 8-channel Isolated Digital Output Module (RoHS)