

I-8042W

16-ch Isolated DI and 16-ch Isolated DO Module

Features

- Digital Input for Sink Type or Source Type
- Digital Output for Sink Type
- Photocouple-Isolation Protection
- Configurable Power-on Value and Safe Value
- 4 kV ESD Protection
- 3750 Vrms Intra-module Isolation
- Wide Operating Temperature Range: -25 ~ +75 °C

Introduction

I-8042W offers 16 channels for Digital Input and 16-Channel for Digital Output.Each of which features Photocouple-isolation. I-8042W supports Sink Type Output with short-circuits protection.

There are option for Power-on value and safe value for your consideration. About Input, you can chose Sink Type or Source Type input by wire connection. I-8042W also has 32 LED indicators for channel status. ±4 kV ESD protection and 3750 Vrms intra-module isolation are standard.

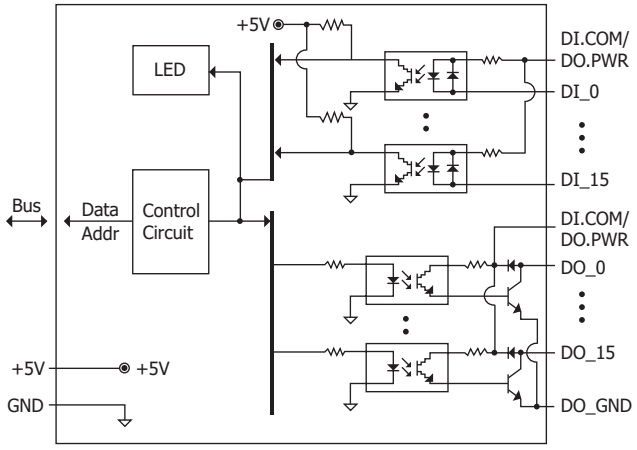
System Specifications

LED Display	
System LED Indicator	1 LED as Power Indicator
I/O LED Indicator	32 LEDs as Digital Input Indicators
Isolation	
Intra-module Isolation, Field-to-Logic	3750 Vrms
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	1.5 W Max.
Mechanical	
Dimensions (W x L x H)	30 mm x 85 mm x 114 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90 % RH, Non-condensing

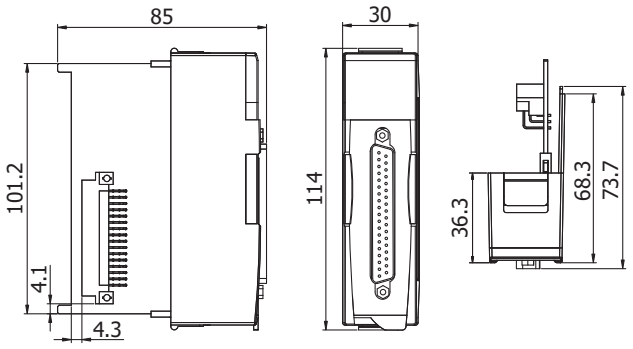
I/O Specifications

Digital Input	
Channels	16
Sink/Source	Sink, Source
Input Type	One common for all Inputs
ON Voltage Level	+10 ~ +30 VDC
OFF Voltage Level	+4 VDC Max.
Input Impedance	3 KΩ, 0.33 W
Digital Output	
Channels	16
Sink/Source (NPN/PNP)	Sink
Output Type	Isolated Open Collector
Max. Load Current	100 mA/Channel
Load Voltage	+5 VDC ~ +30 VDC

Internal I/O Structure



Dimensions (Units: mm)



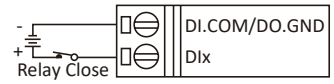
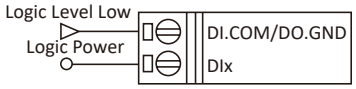
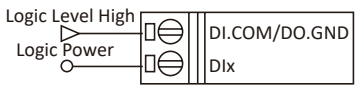
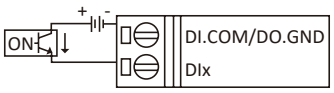
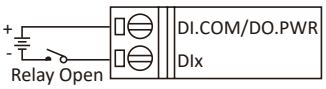
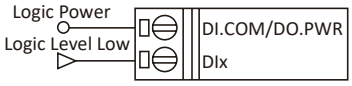
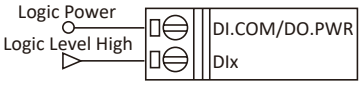
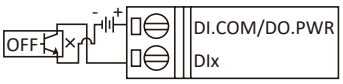
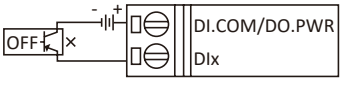
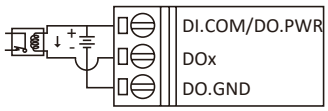
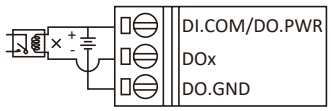
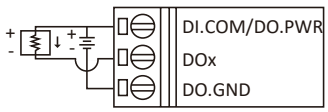
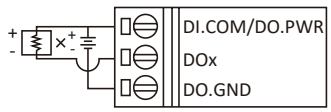
Left Side View | Front View | Top View

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Input Signal Selection

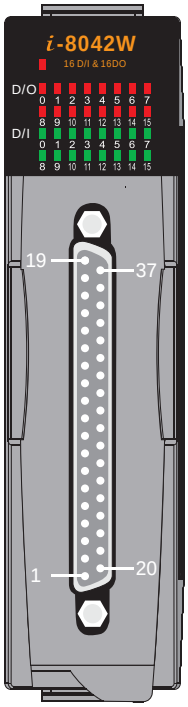
Input Type	Sink	Source
JP3 Jumper Selection	 EXT.PWR DI.COM EXT.GND	 EXT.PWR DI.COM EXT.GND

Wire Connections

Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Sink		
Relay Contact	Relay ON	Relay OFF
		
TTL/CMOS Logic	Voltage > +3.5 V	Voltage < +1 V
		
NPN Output	Open Collector ON	Open Collector OFF
		
PNP Output	Open Collector ON	Open Collector OFF
		
Source		
Relay Contact	Relay ON	Relay OFF
		
TTL/CMOS Logic	Voltage > +3.5 V	Voltage < +1 V
		
NPN Output	Open Collector ON	Open Collector OFF
		
PNP Output	Open Collector ON	Open Collector OFF
		
Output Type	**ON State LED ON Readback as 1**	**OFF State LED OFF Readback as 0**
Drive Relay	Relay ON	Relay OFF
		
Resistance Load		
		

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Pin Assignments



Pin Assignment	Terminal No.		Pin Assignment
EXT.PWR	19	37	EXT.PWR
EXT.GND	18	36	EXT.GND
EXT.GND	17	35	DO_15
DI_15	16	34	DO_14
DI_14	15	33	DO_13
DI_13	14	32	DO_12
DI_12	13	31	DO_11
DI_11	12	30	DO_10
DI_10	11	29	DO_9
DI_9	10	28	DO_8
DI_8	09	27	DO_7
DI_7	08	26	DO_6
DI_6	07	25	DO_5
DI_5	06	24	DO_4
DI_4	05	23	DO_3
DI_3	04	22	DO_2
DI_2	03	21	DO_1
DI_1	02	20	DO_0
DI_0	01		

37-pin Male
D-Sub Connector

Accessories

DN-8K16P16R CR

16-channel digital input terminal and 16-channel relay output board (RoHS)
Female DB37 to Screw Terminal Board (Pitch= 3.81 mm) with DIN-rail Mounting for I-8042W or I-87042W
Include: CA-3705A (DB37 Male to Female Cable, 90º, 50 CM)



I-8042W with DN-8K16P16R

DN-37-381-A CR

Female DB37 to Screw Terminal Board (Pitch=3.81 mm) with DIN-rail Mounting (RoHS)
Include: CA-3710A (DB37 Male to Female, 90º, 1M)



I-8042W with DN-37-381-A

DN-37-A CR

Female DB37 to Screw Terminal Board (Pitch= 5.08 mm) with DIN-rail Mounting (RoHS)
Include: CA-3710A (DB37 Male to Female, 45º, 1M)

Ordering Information

I-8042W CR	16-ch Isolated DI and 16-ch Isolated DO I/O Module (RoHS)

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