



I-8042 I-8042-G

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

Features

- Digital Input for Sink Type or Source Type
- Digital Outputs for Sink Type
- Photocouple-isolation protection
- ±4 kV ESD Protection
- 3750 VDC Intra-module Isolation

Introduction

I-8042 offers 16 channels for Digital Input and 16-Channel for Digital Output.Each of which features Photocouple-isolation. I-8042 supports Sink Type Output. 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 VDC intra-module isolation are standard.



I-8040, I-8041, I-8042, I-87040, I-87041 with DN-37-381-A & DB37 Male to Female Cable (Optional)



I-8040, I-8041, I-8042, I-87040, I-87041 with DN-37-A & DB37 Male to Female Cable (Optional)



I-8042 with DN-8K16P16R & DB37 Male to Female Cable (Optional)

System Specifications

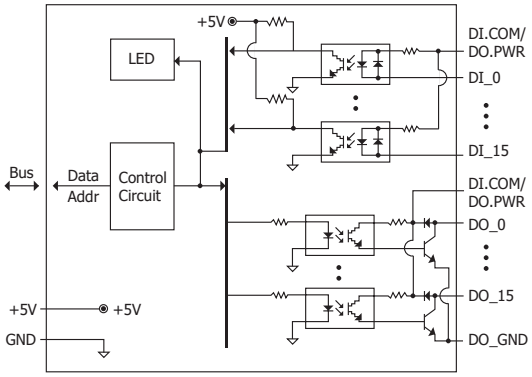
LED Indicators/Display	
System LED Indictors	1 LED as Power Indicator
I/O LED Indicators	32 LEDs as Digital I/O Indicators
Isolation	
Intra-module Isolation, Field-to-Logic	3750 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	1.5 W max.
Mechanical	
Dimensions (W x L x H)	31 mm x 114 mm x 66 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

I/O Specifications

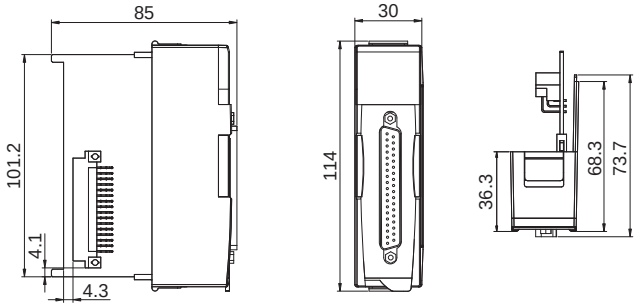
Digital Input	
Channels	16
Type	Wet Contact
Sink/Source	Sink
ON Voltage Level	+3.5 ~ +30 VDC
OFF Voltage Level	+1 VDC max.
Input Impedance	3 kΩ, 0.33W
Digital Output	
Channels	16
Type	Isolated Open Collector
Sink/Source (NPN/PNP)	Sink
Load Voltage	+5 ~ +30 VDC
Max. Load Current	100 mA/Channel

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Internal I/O Structure

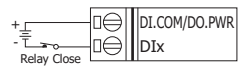
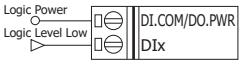
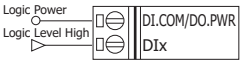
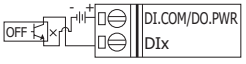


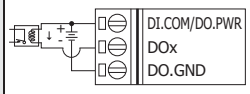
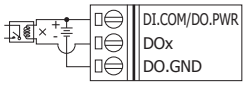
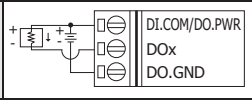
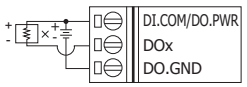
Dimensions (Units: mm)



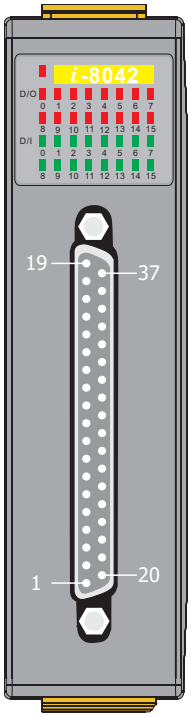
Left View | Front View | Top View

Wire Connections

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

Pin Assignments



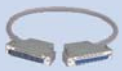
Pin Assignment	Terminal No.		Pin Assignment
DI.COM/ DO.PWR	19	37	DI.COM/ DO.PWR
DO.GND	18	36	DO.GND
DO.GND	17	35	DO_15
DI_15	16	34	DO_14
DI_14	15	33	DO_13
DI_13	14	32	DO_12
DI_12	13	31	DO_11
DI_11	12	30	DO_10
DI_10	11	29	DO_9
DI_9	10	28	DO_8
DI_8	09	27	DO_7
DI_7	08	26	DO_6
DI_6	07	25	DO_5
DI_5	06	24	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

Ordering Information

I-8042 CR	16-ch Isolated DI (Wet) and 16-ch Isolated DO (Sink, NPN) Module (Blue Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)
I-8042-G CR	16-ch Isolated DI (Wet) and 16-ch Isolated DO (Sink, NPN) Module (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)

Accessories

	DN-8K16P16R CR	16-channel digital input terminal and 16-channel relay output board Female DB37 to Screw Terminal Board (Pitch= 3.81 mm) with DIN-rail Mounting (RoHS) Include: CA-3705A (DB37 Male to Female Cable, 90º, 50 CM)
	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 Cable, 90º, 1 M)
	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 Cable, 90º, 1 M)
	CA-3705A CR CA-3710A CR CA-3715A CR	DB37 Male to Female Cable, 90º, 0.5 M/1 M/1.5 M (RoHS)
	CA-3710AM CR CA-3720AM CR CA-3730AM CR CA-3750AM CR CA-37100AM CR	DB37 Male to Female, with Molded Cable, 45º, 1 M/2 M/3 M/5 M/10 M (RoHS)

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