



I-8040W | I-8040PW | I-8040W-A1

32-channel Isolated Digital Input Module

Features

- 32 Wet Contact Digital Input Channels
- Support Sink/Source Type Digital Input
- Photocouple Isolation Protection

Introduction

The I-8040W, I-8040W-A1 and I-8040PW offer 32 channels for Digital Input, each of which features Photocouple-isolation. Either Sink Type or Source Type Input can be selected via wire connections. All channels ±4 kV ESD protection and 3750 VDC intra-module isolation. Paired with a daughter board such as the DN-37-381-A CR, wiring is easier than ever. The I-8040W, I-8040W-A1 and I-8040PW is suitable for +24 VDC Digital Input systems and provides noise protection capabilities that enhance noise immunity in industrial environments. ICP DAS recommends selecting the "P" version of the Digital Input Module for industrial use.



I-8040W, I-8040W-A1 and I-8040PW with DN-37-381-A and DB37 Male to Female Cable (Optional)

System Specifications

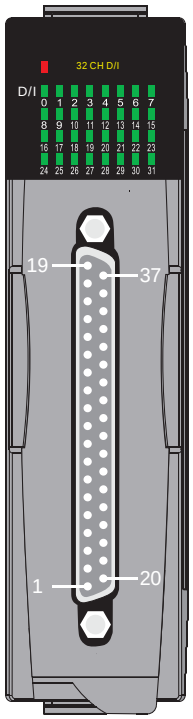
Model	I-8040W	I-8040PW	I-8040W-A1
LED Indicators/Display			
System LED Indictors	1 LED as Power Indicator		
I/O LED Indicators	32 LEDs as Digital Input Indicators		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 Vrms		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal		
Power			
Power Consumption	0.65 W Max.	1 W Max.	0.65 W Max.
Mechanical			
Dimensions (W x L x H)	30 mm x 114 mm x 85 mm		
Environment			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 90 % RH, Non-condensing		

I/O Specifications

Model	I-8040W	I-8040PW	I-8040W-A1
Digital Input			
Channels	32		
Type	Wet Contact		
Sink/Source (NPN/PNP)	Sink, Source		
ON Voltage Level	+10 ~ +30 VDC	+19 ~ +30 VDC	+3.5 ~ +30 VDC
Off Voltage Level	+4 VDC Max.	+11 VDC Max.	<+1 VDC Max.
Input Impedance	3 kΩ, 0.5 W		
Low Pass Filter	-	Yes	-

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

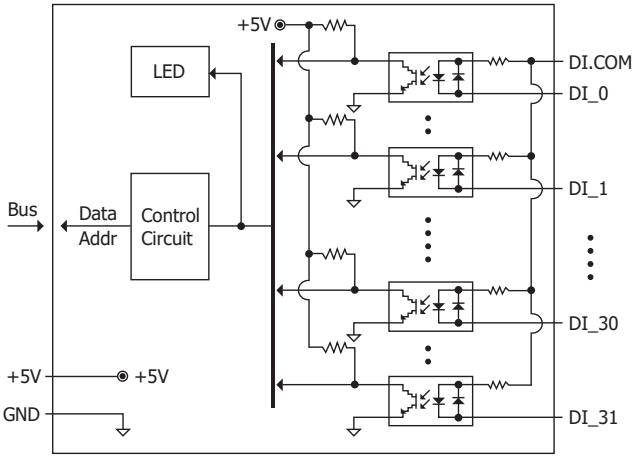
Pin Assignments



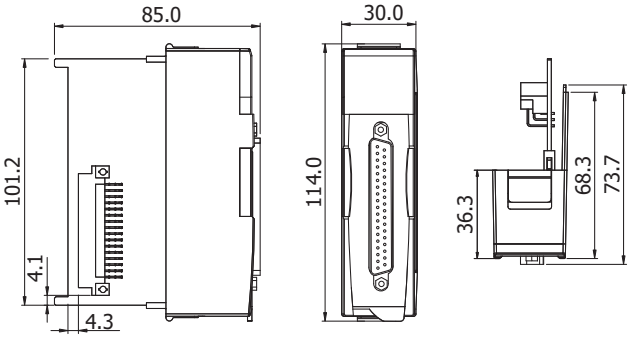
Pin Assignment	Terminal No.		Pin Assignment
DI.COM	19	37	DI.COM
NC	18	36	NC
NC	17	35	DI_31
DI_15	16	34	DI_30
DI_14	15	33	DI_29
DI_13	14	32	DI_28
DI_12	13	31	DI_27
DI_11	12	30	DI_26
DI_10	11	29	DI_25
DI_9	10	28	DI_24
DI_8	09	27	DI_23
DI_7	08	26	DI_22
DI_6	07	25	DI_21
DI_5	06	24	DI_20
DI_4	05	23	DI_19
DI_3	04	22	DI_18
DI_2	03	21	DI_17
DI_1	02	20	DI_16
DI_0	01		

37-pin Male D-Sub Connector

Internal I/O Structure

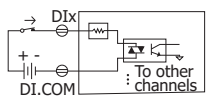
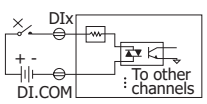
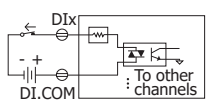
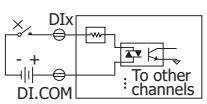


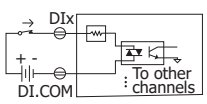
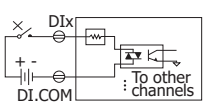
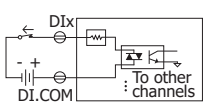
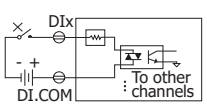
Dimensions (Units: mm)



Left View | Front View | Top View

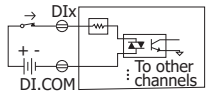
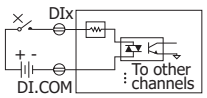
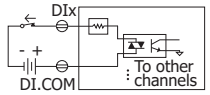
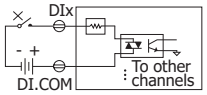
Wire Connections

I-8040W		
Digital Input	ON State Readback as 0	OFF State Readback as 1
	+10 ~ +30 VDC	Open or < +4 VDC
Sink		
Source		

I-8040W-A1		
Digital Input	ON State Readback as 0	OFF State Readback as 1
	+3.5 ~ +30 VDC	Open or < +1 VDC
Sink		
Source		

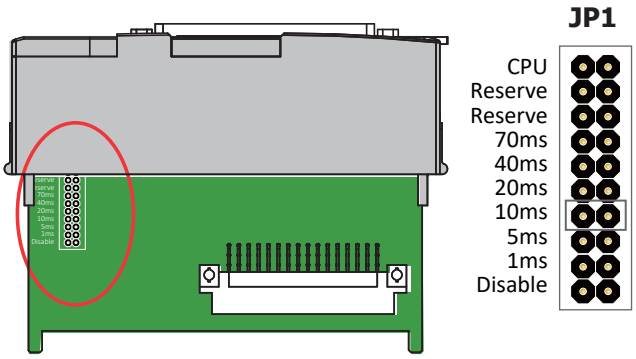
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Wire Connections

I-8040PW		
Digital Input	ON State Readback as 0	OFF State Readback as 1
	+19 ~ +30 VDC	Open or < +11 VDC
Sink		
Source		

Jumpers for Low Pass Filter Selection

For I-8040PW only



Default Setting is **10ms**

Accessories

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/CA-3715A CR



DB37 Male to Female Cable, 90º, 0.5 M/1 M/1.5 M (RoHS)

CA-3710AM/CA-3720AM/CA-3730AM/ CA-3750AM/CA-37100AM CR



DB37 Male to Female, with Molded Cable, 45º, 1 M/2 M/3 M/5 M/10 M (RoHS)

Ordering Information

I-8040W-G CR	32-channel Isolated DI (Wet, 10~30 VDC) Module (RoHS)
I-8040PW-G CR	32-channel Isolated DI (Wet, 10~30 VDC) Module with Low Pass Filter (RoHS)
I-8040W-A1-G CR	32-channel Isolated DI (Wet, 3.5~30 VDC) Module (RoHS)

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000