



I-9040P

32-channel Isolated Digital Input Module

■ Introduction

The I-9040P is a 32-channel digital input module, each channel features photo-couple isolation and can be either sink- or source-type input, selectable by the wiring. The ON voltage level of the I-9040P is ranged from +19 V to +30 V, while the OFF voltage level is under +11 V. It is suitable for +24 VDC digital input systems.

By pairing with a daughter board such as the DN-37-381-A, the wiring is easier than ever. 32 LED indicators are provided for monitoring DI channel status, together with 4 kV ESD protection and 3750 VDC intra-module isolation.

Digital Input Module

■ Dimensions (Units: mm)

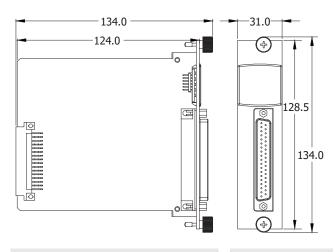
₱ Features

■ 32-channel Digital Input

■ Compatible with 24 V Levels

■ Sink-type or Source-type Digital Input

Optional Daughter Boards for Easy Field Wiring



Left View

Front View

■ System Specifications

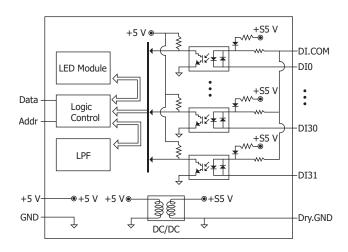
LED Display			
System LED Indicator	1 LED as Power Indicator		
I/O LED Indicator	32 LEDs as Digital Input Indicators		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 VDC		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal ±8 kV Air for Random Point		
Power			
Power Consumption	1 W Max.		
Mechanical			
Dimensions (W x L x H)	31 mm x 134 mm x 144 mm		
Environment			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 90 % RH, Non-condensing		

■ I/O Specifications

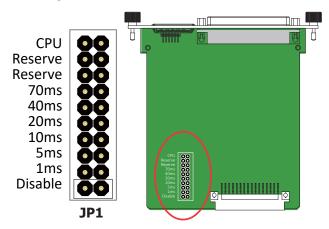
Digital Input			
Channels		32	
Sink/Source (NPN/PNP)		Sink/Source	
Input Type		Dry, Wet	
Dry Contact	On Voltage Level	Close to GND	
	Off Voltage Level	Open	
Wet Contact	On Voltage Level	+19 VDC ~ +30 VDC	
	Off Voltage Level	+11 VDC Max.	
Input Im	pedance	3 KΩ, 0.5W	
Low Pass Filter		1 ms/5 ms/10 ms/20 ms/40	
		ms/70 ms (by Jumper select)	
		or CPU parameter setting;	
		Default Setting is Disable	

ICP DAS CO., LTD Website: http://www.icpdas.com Vol.2023.10 1/2

■ Internal I/O Structure



■ Jumpers for Low Pass Filter Selection



Default Setting is **Disable**

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, 90°, 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, 90°, 1 M)

CA-3705A CR/CA-3710A/CA-3715A CR



DB37 Male to Female Cable, 90°, 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, 45°, 1 M/2 M/3 M/5 M/10 M (RoHS)

■ Pin Assignments



Pin Assign- ment	Те	rminal N	lo.	Pin Assign- ment
DI.COM	19		37	DI.COM
Dry.GND	18		36	Dry.GND
Dry.GND	17		35	DI31
DI15	16		34	DI31
DI14	15		33	DI30
DI13	14		32	DI28
DI12	13		31	DI27
DI11	12		30	DI26
DI10	11		29	DI25
DI9	10	•	28	DI24
DI8	09	•	27	DI23
DI7	80	•	26	DI22
DI6	07		25	DI21
DI5	06		24	DI20
DI4	05		23	DI19
DI3	04		22	DI18
DI2	03		21	DI17
DI1	02		20	DI16
DI0	01		_0	2120
		U		pin Male Connector

■ Wire Connections

Input Type	ON State Readback as 1	OFF State Readback as 0	
	Close to GND	Open	
Dry Contact	Dry.GND +S5 V To other channels	Dry.GND +S5 V To other channels	
Input Type	ON State Readback as 1	OFF State Readback as 0	
Wet Contact (Sink)	DIX R TO other channels	DIX R To other DI.COM To other Channels	

Ordering Information

I-9040P CR

32-ch Isolated DI (Dry, Wet) Module with Low Pass Filter (RoHS)

ICP DAS CO., LTD Website: http://www.icpdas.com Vol.2023.10 2/2