



I-9040P

32-channel Isolated Digital Input Module with Low Pass Filter

Features

- 32-channel Digital Input
- Sink-type or Source-type Digital Input
- Compatible with 24 V Levels
- Channel Status LED Indicators
- Optional Daughter Boards for Easy Field Wiring
- 3750 VDC Intra-module Isolation
- Wide Operating Temperature Range: -25 to +75 °C



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.

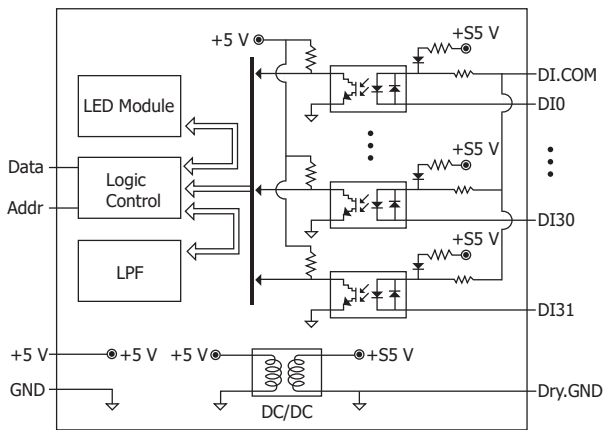
System Specifications

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 134 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

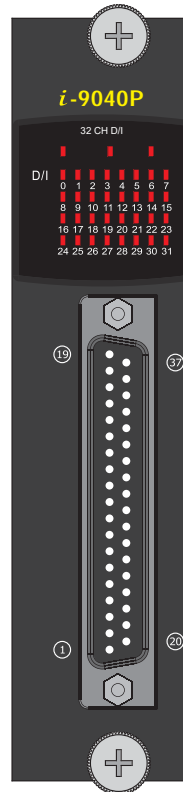
I/O Specifications

Digital Input		
Channels	32	
Sink/Source (NPN/PNP)	Sink/Source	
Input Type	Dry, Wet	
Resolution	14-bit	
Dry Contact	On Voltage Level	±0.1% of FSR
	Off Voltage Level	±0.2% of FSR
Wet Contact	On Voltage Level	+19 VDC ~ +30 VDC
	Off Voltage Level	+11 VDC Max.
Input Impedance	3 KΩ, 0.5W	
Channel-to-channel Isolation	-	
Low Pass Filter		
Response Time	OFF to ON	1ms/5ms/10ms/20ms/40ms/70ms (by Jumper select) or CPU parameter setting Default Setting is 10ms
	ON to OFF	1ms/5ms/10ms/20ms/40ms/70ms (by Jumper select) or CPU parameter setting Default Setting is 10ms

Internal I/O Structure



Pin Assignments



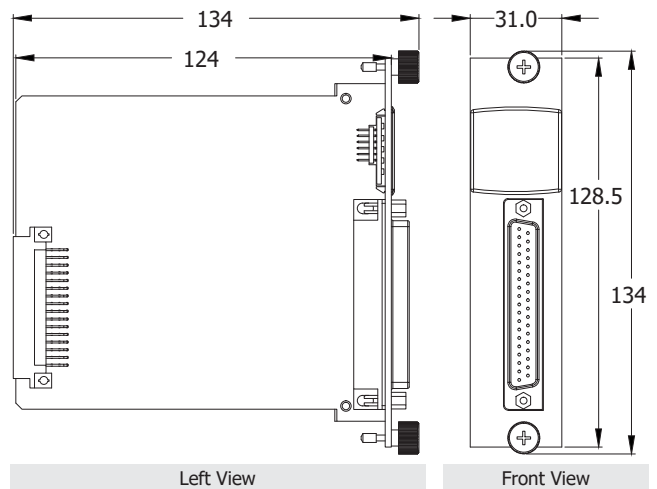
Pin Assignment	Terminal No.	Pin Assignment
DI.COM	19	37 DI.COM
Dry.GND	18	36 Dry.GND
Dry.GND	17	35 DI31
DI15	16	34 DI30
DI14	15	33 DI29
DI13	14	32 DI28
DI12	13	31 DI27
DI11	12	30 DI26
DI10	11	29 DI25
DI9	10	28 DI24
DI8	09	27 DI23
DI7	08	26 DI22
DI6	07	25 DI21
DI5	06	24 DI20
DI4	05	23 DI19
DI3	04	22 DI18
DI2	03	21 DI17
DI1	02	20 DI16
DI0	01	

37-pin Male D-sub Connector

Wire Connections

Input Type	ON State Readback as 1	OFF State Readback as 0
	Close to GND	Open
Dry Contact		
Wet Contact (Sink)		
Wet Contact (Source)		

Dimensions (Units: mm)



Ordering Information

I-9040P CR	32-channel Isolated Digital Input Module with Low Pass Filter (RoHS)
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Accessories

DN-37-A	I/O Connector Block with DIN-Rail Mounting and 37-pin D-sub Connector (pitch: 5.08 mm) Including One CA-3710A (37-pin Male-Female D-sub Cable, 1.0M)	CA-3720AM	DN-37 Male-Female D-sub cable 2M (Moding) Cable for Daughter Board (45°)
DN-37-381-A	I/O Connector Block with DIN-Rail Mounting and 37-pin D-sub Connector (pitch: 3.81 mm) Including One CA-3710A (37-pin Male-Female D-sub Cable, 1.0M)	CA-3730AM	DN-37 Male-Female D-sub cable 3M (Moding) Cable for Daughter Board (45°)
CA-3710AM	DN-37 Male-Female D-sub cable 1M (Moding) Cable for Daughter Board (45°)	CA-3750AM	DN-37 Male-Female D-sub cable 5M (Moding) Cable for Daughter Board (45°)
		CA-37100AM	DN-37 Male-Female D-sub cable 10M (Moding) Cable for Daughter Board (45°)