

**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 Vrms 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.

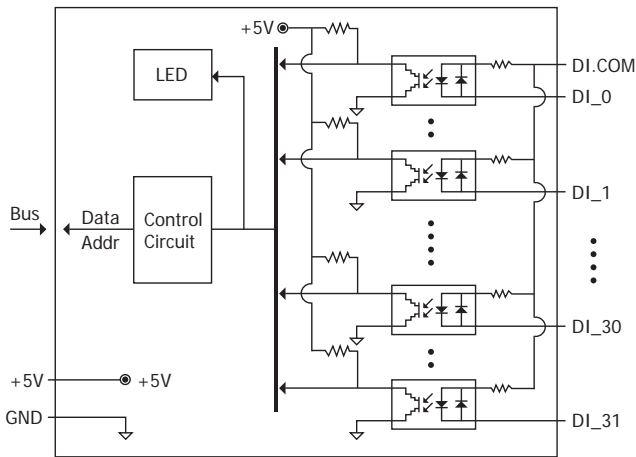
### System Specifications

Model	I-9040P
<b>LED Display</b>	
System LED Indicators	1 LED as Power Indicator
I/O LED Indicator	32 LEDs as Digital Input Indicators
<b>Isolation</b>	
Intra-module Isolation, Field to logic	3750 Vrms
<b>EMS Protection</b>	
ESD(IEC 61000-4-2)	±4 kV Contact for Each Terminal
	±8 kV Air for Random Point
<b>Power</b>	
Power Consumption	1 W Max.
<b>Mechanical</b>	
Dimensions (L x W x H)	144 mm x 31 mm x 134 mm
<b>Environment</b>	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

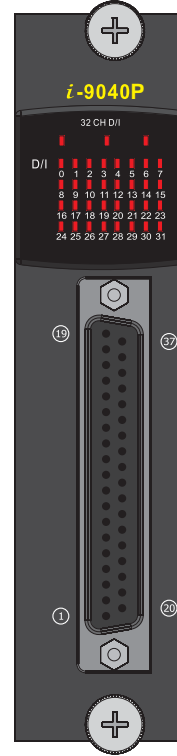
### I/O Specifications

Model	I-9040P	
<b>Digital Input</b>		
Channels	32	
Sink/Source (NPN/PNP)	Sink/Source	
Input Type	One Common for All Digital Inputs	
On Voltage Level	+19 V ~ +30 V	
Off Voltage Level	+11 V Max.	
Input Impedance	3 KΩ, 0.5W	
Channel-to-channel Isolation	-	
<b>Low Pass Filter</b>		
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 10mss

### Internal I/O Structure



### Pin Assignments



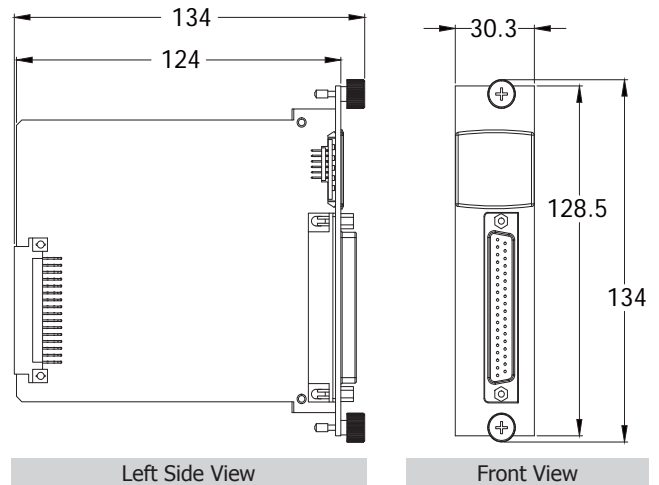
Pin Assignment	Terminal No.	Pin Assignment
DI.COM	19	37 DI.COM
NC	18	36 NC
NC	17	35 DI_31
DI_15	16	34 DI_30
DI_14	15	33 DI_29
DI_13	14	32 DI_28
DI_12	13	31 DI_27
DI_11	12	30 DI_26
DI_10	11	29 DI_25
DI_9	10	28 DI_24
DI_8	09	27 DI_23
DI_7	08	26 DI_22
DI_6	07	25 DI_21
DI_5	06	24 DI_20
DI_4	05	23 DI_19
DI_3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

### Wire Connections

Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Relay Contact	Relay ON 	Relay OFF 
	Voltage > 19 V	Voltage < 11 V
TTL/CMOS Logic	Logic Power Logic Level Low 	Logic Power Logic Level Low 
NPN Output	Open Collector ON 	Open Collector OFF 
	Open Collector ON	Open Collector OFF
PNP Output	Open Collector ON 	Open Collector OFF 
	Open Collector ON	Open Collector OFF

### Dimensions (Units: mm)



### Ordering Information

<b>I-9040P CR</b>	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°)