



## I-9041P

32-channel Isolated Digital Input Module

### Features

- 32-channel Open Collector Output
- Sink-type Digital Output
- Channel Status LED Indicators
- Up to 60 VDC Overvoltage Protection
- Overload Protection
- Short-circuit Protection
- 4 kV ESD Protection



### Introduction

The I-9041P is a 32-channel sink-type digital output module. Each output channel is compatible with +10 VDC to +50 VDC signals, based on the external power supply. 32 LED indicators are provided to display the on/off status of every channel. Short circuit protection, overvoltage protection and overload protection are also included.

The I-9041P features 3750 VDC field to logic isolation and 4 kV ESD protection, but doesn't provide channel-to-channel isolation. It can be paired with a daughterboard, such as the DN-37-381-A for easy wiring, or the DN-8K32R for relay output, to connect to a wide range of industrial switches and devices.

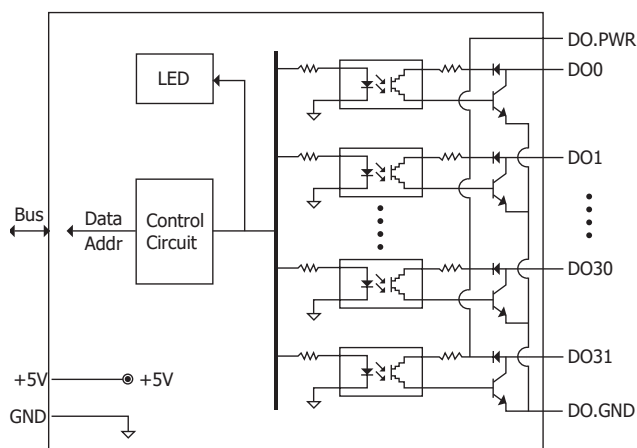
### System Specifications

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	1.5 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 Output	
Channels	32
Sink/Source (NPN/PNP)	Sink/Source
Type	Isolated Open Collector
Max. Load Current	100 mA/Channel
Load Voltage	+10 VDC ~ +50 VDC
Overvoltage Protection	60 VDC
Overload Protection	1.1 A
Short-circuit Protection	Yes

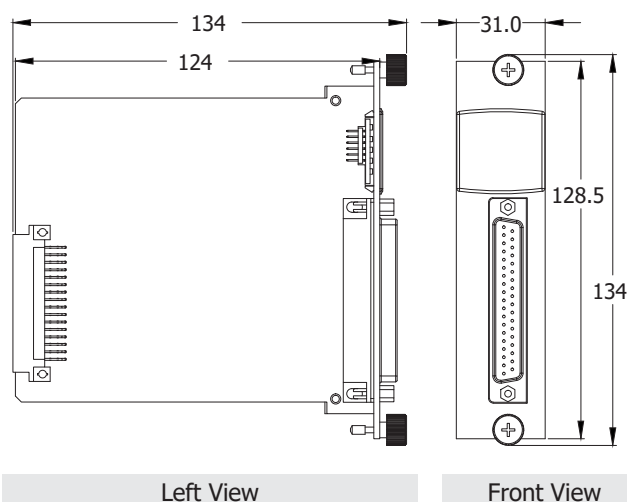
## Internal I/O Structure



## Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance Load		

## Dimensions (Units: mm)



## Pin Assignments

Pin Assignment	Terminal No.	Pin Assignment
DO.PWR	19	37 DO.PWR
DO.GND	18	36 DO.GND
DO.GND	17	35 DO31
DO15	16	34 DO30
DO14	15	33 DO29
DO13	14	32 DO28
DO12	13	31 DO27
DO11	12	30 DO26
DO10	11	29 DO25
DO9	10	28 DO24
DO8	09	27 DO23
DO7	08	26 DO22
DO6	07	25 DO21
DO5	06	24 DO20
DO4	05	23 DO19
DO3	04	22 DO18
DO2	03	21 DO17
DO1	02	20 DO16
DO0	01	

37-pin Male D-sub Connector

## 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)

## Ordering Information

<b>I-9041P CR</b>	32-Channel Isolated Digital Output Module (RoHS)
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