

## I-9041P

32-channel Isolated Digital Output 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
- Optional Daughter Boards for Easy Field Wiring
- Wide Operating Temperature Range: -25 to +75°C



### 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 Vrms 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.

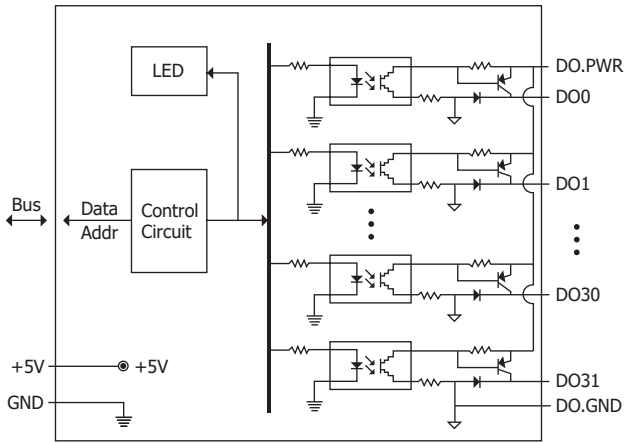
### System Specifications

Model	I-9041P
<b>LED Display</b>	
System LED Indicators	1 LED as Power Indicator
I/O LED Indicator	32 LEDs as Digital Output 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	1.5 W Max.
<b>Mechanical</b>	
Dimensions (L × W × H)	144 mm × 31 mm × 134 mm
I/O Connector	37-pin D-sub Connector
<b>Environment</b>	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 90% RH, Non-condensing

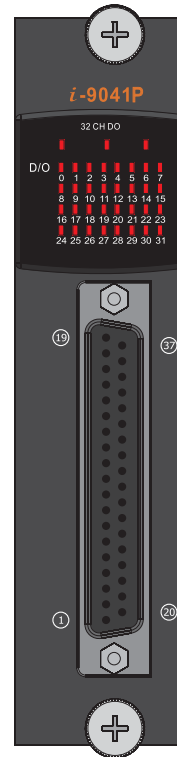
### I/O Specifications

Model	I-9041P
<b>Digital Output</b>	
Channels	32
Sink/Source (NPN/PNP)	Sink
Output 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



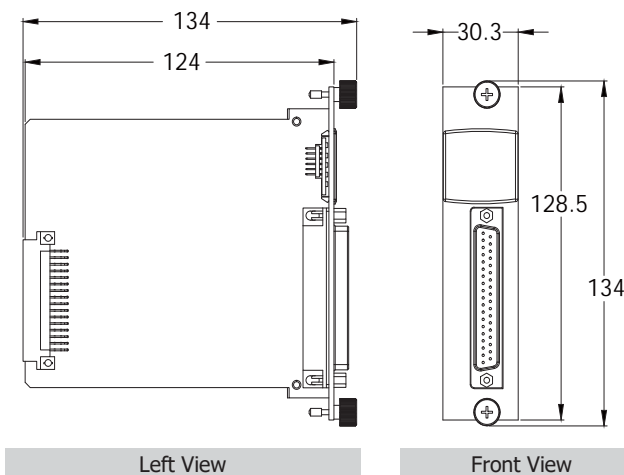
### Pin Assignments



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

### Dimensions (Units: mm)



### Wire Connections

Output Type	ON State LED ON Readback as 1	ON State LED OFF Readback as 0
Digital Output (Drive Relay)		
Digital Output (Resistance Load)		

### Ordering Information

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

DN-8K32R	32-channel Relay Output Board Including One CA- 3705A (37-pin Male-Female D-sub Cable, 0.5M)	CA-3710AM	DN-37 Male-Female D-sub cable 1M (Moding) Cable for Daughter Board (45°)
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-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°)