



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		
CE FC ROHS		

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

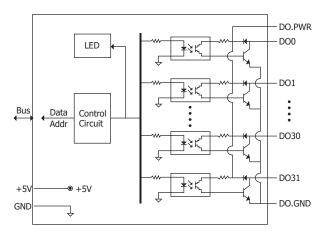
LED Display			
System LED Indicator	1 LED as Power Indicator		
I/O LED Indicator	32 LEDs as Digital Input Indicators		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 VDC		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal ±8 kV Air for Random Point		
Power			
Power Consumption	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	
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	

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2020.9 1/2

■ Internal I/O Structure



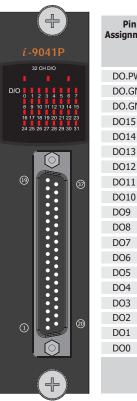
■ Wire Connections

Output Type	ON State LED ON Readback as 1	ON State LED OFF Readback as 0	
Digital Ouput (Drive Relay)	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND	
Digital Ouput (Resistance Load)	DO.PWR DOx DO.GND	DO.PWR DOX DO.GND	

■ Ordering Information

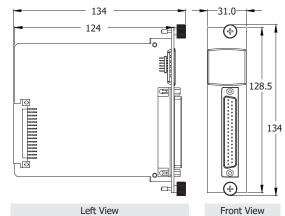
I-9041P CR 32-channel Isolated Digital Output Module (RoHS)

■ Pin Assignments



Pin Assignment	Te	erminal No	0.	Pin Assignment
DO.PWR	19		37	DO.PWR
DO.GND	18		36	DO.FWR
DO.GND	17		35	DO.GND
DO15	16		34	DO31
DO14	15		33	DO30
DO13	14		32	DO29
DO12	13		31	DO28
DO11	12			
DO10	11	•	30	DO26
DO9	10	•	29	DO25
DO8	09	•	28	DO24
D07	08	•	27	DO23
DO6	07		26	DO22
DO5	06	•	25	DO21
DO4	05		24	DO20
DO3	04		23	DO19
DO2	03	•	22	DO18
DO1	02		21	DO17
DO0	01	••	20	DO16
		0		-pin Male b Connector

■ Dimensions (Units: mm)



Accessories

	DN-8K32R CR	32-channel Relay Output Board (RoHS) Include: CA-3705A (DB37 Male to Female Cable, 90°, 0.5 M)
	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)
53	CA-3705A CR CA-3710A CR CA-3715A CR	DB37 Male to Female Cable, 90°, 0.5 M/1 M/1.5 M (RoHS)
3	CA-3710AM CR CA-3720AM CR CA-3730AM CR CA-3750AM CR CA-37100AM CR	DB37 Male to Female, with Molded Cable, 45°, 1 M/2 M/3 M/5 M/10 M (RoHS)

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2020.9 2/2