







I-8041W-G I-8041PW-G I-8041AW-G

32-channel Isolated Digital Output Module

Introduction

The I-8041W/I-8041PW/I-8041AW module offers 32 Digital Output channels, each of which features Photocouple isolation. The I-8041W/I-8041PW supports Sink Type Output using an open collector and I-8041AW supports Source Type Output with short circuit protection. The I-8041W/I-8041PW/ I-8041AW includes 32 LED indicators that can be used to monitor the status of the Digital Output channels. ±4 kV ESD protection and 3750 VDC intra-module isolation is provided as standard. The I-8041W/I-8041PW/I-8041AW can be paired with a daughterboard, such as the DN-37-381-A CR for easy wiring, or the DN-8K32R for Relay Output. The I-8041PW integrates over-current, over-voltage and shortcircuit functionality. ICP DAS recommends selecting either the "PW" version of the digital output module for industrial use. ICP DAS offers a variety of options. ICP DAS recommends selecting either the "AW" version of the Digital Output Module for industrial use.

System Specifications

Model	I-8041W	I-8041PW	I-8041AW
LED Indicators/Display			
System LED Indicator	1 LED as Power Indicator		
I/O LED Indicator	32 LEDs as Digital Output Indicators		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 VDC		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal		
Power			
Power Consumption	1.5 W max.		
Mechanical			
Dimensions (W x L x H)	30 mm x 114 mm x 85 mm		
Environment			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 90% RH, Non-condensing		

₱ Features

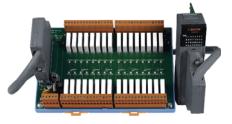
- 32-channel Open Collector Output
- Sink Type Digital Output of I-8041W/I-8041PW
- Short circuit protection, Overvoltage Protection and Overload Protection for I-8041PW
- 3750 VDC Intra-module Isolation
- Each Digital channel has its own status LED
- Source Type Digital Output of I-8041AW











I-8041W, I-8041AW, I-8041PW, I-87041W and I-87041PW with DN-8K32R & DB37 Male to Female Cable (Optional)

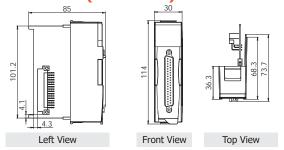


I-8017DW, I-8040W, I-8040PW, I-8041W, I-8041AW, I-8041PW, I-8042W, I-87017DW, I-87024DW, I-87028CDW, I-87040W, I-87040PW, I-87041W, I-87041PW and I-87042W with DN-37-381-A & DB37 Male to Female Cable

■ I/O Specifications

Model	I-8041W	I-8041PW	I-8041AW
Digital Output			
Channels	32		
Туре	Isolated Open Collector		
Sink/Source (NPN/PNP)	Sink		Source
Load Voltage	+5 ~ +30 VDC		+5 ~ +30 VDC
Max. Load Current	100 mA/Channe	I	
Overvoltage Protection	-	60 VDC	-
Overload Protection	-	1.1 A	-
Short-circuit Protection	-	Yes	-

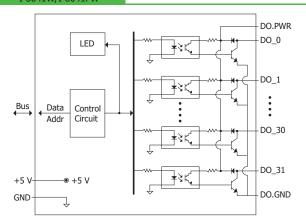
Dimensions (Units: mm)



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■ Internal I/O Structure

I-8041W/I-8041PW



Bus Data Control Addr Circuit +5V GND DO.PWR DO_0 DO_1 DO_1 DO_30 DO_31 DO.GND

■ Wire Connections

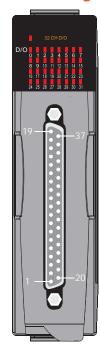
I-8041W/I-8041PW

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0	
	Relay ON	Relay OFF	
Drive Relay	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND	
Resistance Load	+ DO.PWR DOX DO.GND	DO.PWR DOX DO.GND	

I-8041AW

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0	
	Relay ON	Relay OFF	
Drive Relay	DOX DO.PWR DO.GND	DOX DO.PWR DO.GND	
Resistance Load	DOX DO.PWR DO.GND	DOX DO.PWR DO.GND	

■ Pin Assignments



Pin Assignment	Terminal	Q	No.	Pin Assignment
DO.PWR	19		37	DO.PWR
DO.GND	18	•		
DO.GND	17	•	36	DO.GND
DO_15	16		35	DO_31
DO_14	15		34	DO_30
DO_13	14	• •	33	DO_29
DO_12	13	•	32	DO_28
DO 11	12	•	31	DO_27
DO 10	11	•	30	DO_26
DO 9	10	•	29	DO_25
DO 8	09	•	28	DO_24
DO 7	08	•	27	DO_23
DO 6	07	•	26	DO_22
DO 5	06	•	25	DO_21
DO 4	05	•	24	DO_20
DO_1	04		23	DO_19
DO_3	03	•	22	DO_18
DO_2 DO 1	02	•	21	DO_17
_			20	DO_16
DO_0	01		1	
		0		in Male b Connector

■ Ordering Information

I-8041W-G CR	32-ch Isolated DO (Sink, NPN, 5 ~ 30 VDC) Module (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)
I-8041PW-G CR	32-ch Isolated DO (Sink, NPN, 10 ~ 50 VDC) Module with Self Protection (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)
I-8041AW-G CR	32-ch Isolated DO (Source, PNP, $5\sim30$ VDC) Module (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)

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)
	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)

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