



**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.  $\pm 4$  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
<b>LED Indicators/Display</b>			
System LED Indicator	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 Vdc		
<b>EMS Protection</b>			
ESD (IEC 61000-4-2)	$\pm 4$ kV Contact for each Terminal		
<b>Power</b>			
Power Consumption	1.5 W max.		
<b>Mechanical</b>			
Dimensions (W x L x H)	30 mm x 114 mm x 85 mm		
<b>Environment</b>			
Operating Temperature	$-25 \sim +75$ °C		
Storage Temperature	$-40 \sim +85$ °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)

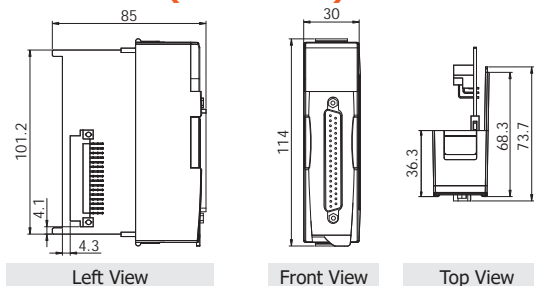


I-8017DW, I-8040W, I-8040PW, I-8041W, I-8041AW, I-8041PW, I-8042W, I-87017DW, I-87024DW, I-87028CDW, I-87040W, I-87040PW, I-87041W, I-87041PW and I-87042W with DN-37-381-A & DB37 Male to Female Cable (Optional)

### I/O Specifications

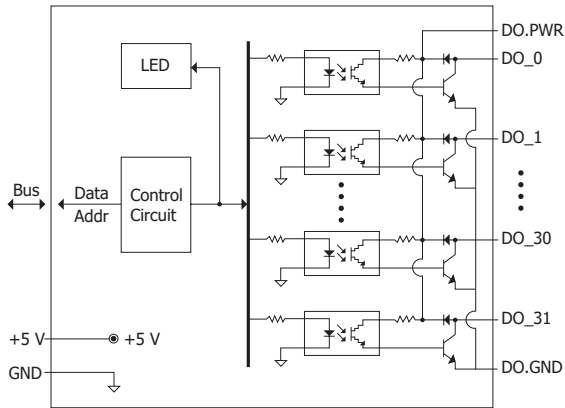
Model	I-8041W	I-8041PW	I-8041AW
<b>Digital Output</b>			
Channels	32		
Type	Isolated Open Collector		
Sink/Source (NPN/PNP)	Sink		Source
Load Voltage	+5 ~ +30 VDC	+10 ~ +50 VDC	+5 ~ +30 VDC
Max. Load Current	100 mA/Channel		
Overvoltage Protection	-	60 VDC	-
Overload Protection	-	1.1 A	-
Short-circuit Protection	-	Yes	-

### Dimensions (Units: mm)

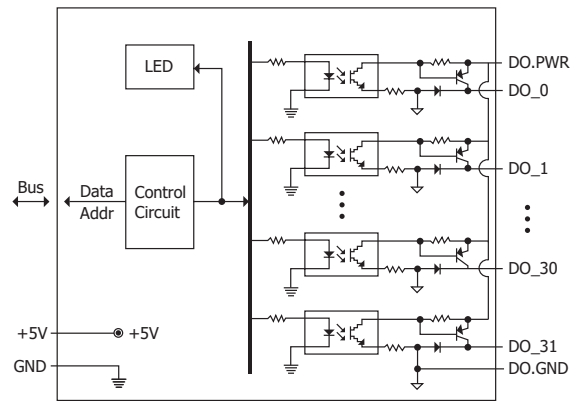


## Internal I/O Structure

I-8041W/I-8041PW



I-8041AW



## Wire Connections

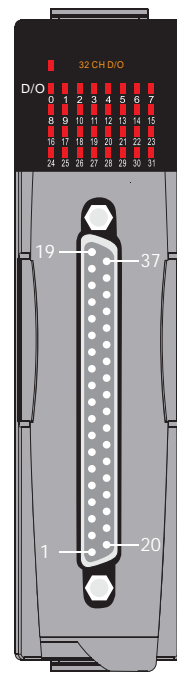
I-8041W/I-8041PW

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	No.	Pin Assignment
DO.PWR	19		
DO.GND	18	37	DO.PWR
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_3	04	23	DO_19
DO_2	03	22	DO_18
DO_1	02	21	DO_17
DO_0	01	20	DO_16

37-pin Male D-Sub Connector

## Ordering Information

<b>I-8041W-G CR</b>	32-ch Isolated DO (Sink, NPN, 5 ~ 30 VDC) Module (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)
<b>I-8041PW-G CR</b>	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)
<b>I-8041AW-G CR</b>	32-ch Isolated DO (Source, PNP, 5 ~ 30 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)
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)