



## I-8040W-G    I-8040PW-G

32-channel Isolated Digital Input Module

### Features

- Sink or Source Type Digital Input
- Photocouple-isolation protection
- Low Pass Filter for I-8040PW
- Optional Daughter board connectivity
- 3750 Vdc Intra-module Isolation



### Introduction

The I-8040W/I-8040PW offer 32 channels for Digital Input, each of which features Photocouple-isolation. Either Sink Type or Source Type Input can be selected via wire connections. All channels  $\pm 4$  kV ESD protection and 3750 Vdc intra-module isolation. Paired with a daughter board such as the DN-37-381-A CR, wiring is easier than ever. The I-8040PW is suitable for +24 Vdc Digital Input systems and provides noise protection capabilities that enhance noise immunity in industrial environments. ICP DAS recommends selecting the "P" version of the Digital Input Module for industrial use.



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)

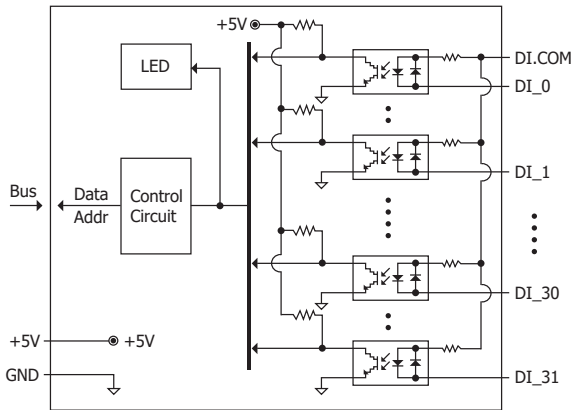
### System Specifications

Model	I-8040W	I-8040PW
<b>LED Indicators/Display</b>		
System LED Indicator	1 LED as Power Indicator	
I/O LED Indicator	32 LEDs as Digital Input 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	0.65 W max.	1 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	

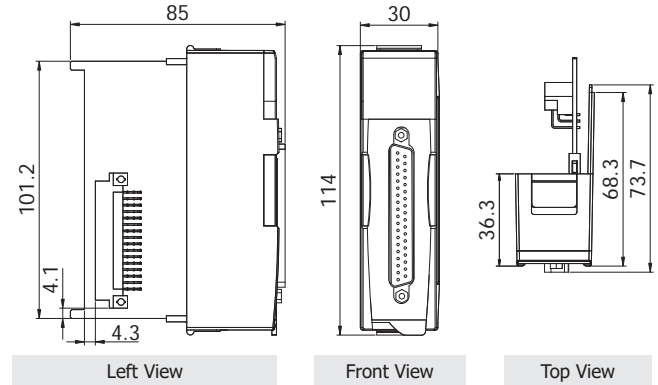
### I/O Specifications

Model	I-8040W	I-8040PW
<b>DC Digital Input</b>		
Channels	32	
Type	Wet	
Sink/Source (NPN/PNP)	Sink, Source	
ON Voltage Level	+10 ~ +30 VDC	+19 ~ +30 VDC
OFF Voltage Level	+4 VDC Max.	+11 VDC Max.
Input Impedance	3 k $\Omega$ , 0.5W	
<b>Low Pass Filter for I-8040PW</b>		
Response time	OFF to ON	1 ms/5 ms/10 ms/20 ms/40 ms/70 ms (by Jumper select) or CPU parameter setting Default Setting is 10ms
	ON to OFF	1 ms/5 ms/10 ms/20 ms/40 ms/70 ms (by Jumper select) or CPU parameter setting Default Setting is 10ms

## Internal I/O Structure



## Dimensions (Units: mm)



## Wire Connections

I-8040W		
Digital Input/Counter	ON State Readback as 0	OFF State Readback as 1
Sink	+10 ~ +30 VDC 	OPEN or < +4 VDC 
Source	+10 ~ +30 VDC 	OPEN or < +4 VDC 

I-8040PW		
Digital Input/Counter	ON State Readback as 0	OFF State Readback as 1
Sink	+19 ~ +30 VDC 	OPEN or < +11 VDC 
Source	+19 ~ +30 VDC 	OPEN or < +11 VDC 

## Pin Assignments

Pin Assignment	Terminal	No.	Pin Assignment
DI.COM	19	37	DI.COM
NC	18	36	NC
NC	17	35	DI_31
DI_15	16	34	DI_30
DI_14	15	33	DI_29
DI_13	14	32	DI_28
DI_12	13	31	DI_27
DI_11	12	30	DI_26
DI_10	11	29	DI_25
DI_9	10	28	DI_24
DI_8	09	27	DI_23
DI_7	08	26	DI_22
DI_6	07	25	DI_21
DI_5	06	24	DI_20
DI_4	05	23	DI_19
DI_3	04	22	DI_18
DI_2	03	21	DI_17
DI_1	02	20	DI_16
DI_0	01		

37-pin Male D-Sub Connector

## Ordering Information

<b>I-8040W-G CR</b>	32-ch Isolated DI (Wet, 10 ~ 30 VDC) Module (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)
<b>I-8040PW-G CR</b>	32-ch Isolated DI (Wet, 19 ~ 30 VDC) Module with Low Pass Filter (Gray Cover) (RoHS) Includes CA-4002F (DB37 connector Female with plastic cover)

## 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 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)