



## I-8053W-G I-8053PW-G I-8053W-A1-G

16-channel Isolated Digital Input Module

### Features

- 16-channel Digital Inputs
- Wet Contact, Selectable via Wire Connections
- Photocouple Isolation
- Long Distance Measurement
- 4 kV ESD Protection
- 3750 Vdc Intra-module Isolation



### Introduction

The I-8053W, I-8053PW and I-8053W-A1 offer 16 channels for Digital Input, catering for both dry and wet contact, with an effective distance for dry contact of up to 500 meters. The I-8053W series provides 16 LED indicators that can be used to monitor the DI channel status. 4 kV ESD protection and 3750 VDC intra-module isolation are also provided to enhance noise immunity capabilities in industrial environments. ICP DAS recommends selecting either the "P" or "A1" version of the digital input module for industrial use.

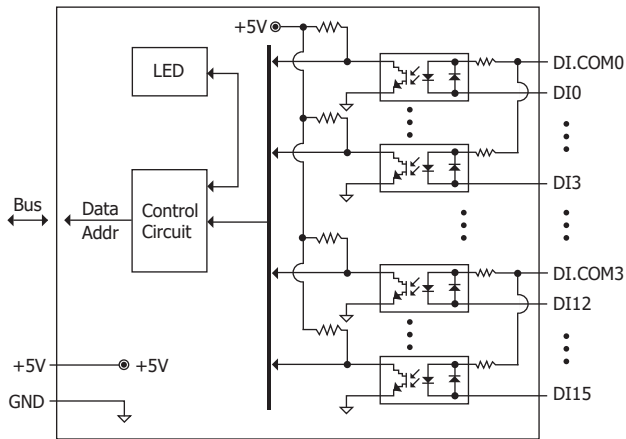
### System Specifications

Model	I-8053W	I-8053PW	I-8053W-A1
<b>LED Indicators/Display</b>			
System LED Indicators	1 LED as Power Indicator		
I/O LED Indicators	16 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)	±4 kV Contact for each Terminal		
<b>Power</b>			
Power Consumption	0.4 W Max.		
<b>Mechanical</b>			
Dimensions (W x L x H)	30 mm x 102 mm x 115 mm		
<b>Environment</b>			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 90% RH, Non-condensing		

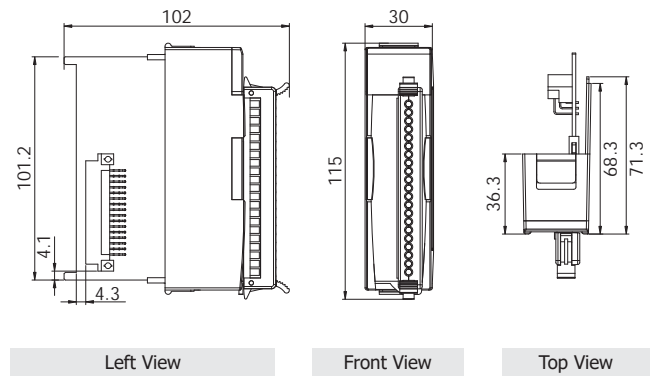
### I/O Specifications

Model	I-8053W	I-8053PW	I-8053W-A1
<b>Digital Input</b>			
Channels	16		
Type	Wet Contact		
Sink/Source (NPN/PNP)	Sink, Source		
ON Voltage Level	+10 ~ +30 VDC		+3.5 ~ +30 VDC
Off Voltage Level	+4 VDC max.	+1 VDC max.	
Input Impedance	3 kΩ, 0.5 W	3 kΩ, 1 W	10 kΩ, 1 W
Low Pass Filter	-	Yes	-
Effective Distance for Dry Contact	500 m max.		

## Internal I/O Structure



## Dimensions (Units: mm)



## Wire Connections

Input Type	ON State LED ON Readback as 0	OFF State LED OFF Readback as 1
Relay Contact	Relay ON 	Relay OFF 
	TTL/CMOS Logic Voltage > 10 V 	TTL/CMOS Logic Voltage < 4 V 
NPN Output	Open Collector ON 	Open Collector OFF 
	PNP Output	Open Collector ON 

## Pin Assignments

Terminal No.	Pin Assignment
01	DI.COM0
02	DI0
03	DI1
04	DI2
05	DI3
06	DI.COM1
07	DI4
08	DI5
09	DI6
10	DI7
11	DI.COM2
12	DI8
13	DI9
14	DI10
15	IN11
16	DI.COM3
17	DI12
18	DI13
19	DI14
20	DI15

## Ordering Information

<b>I-8053W-G CR</b>	16-channel Isolated Digital Input Module ( Gray Cover ) ( RoHS )
<b>I-8053PW-G CR</b>	16-channel Isolated Digital Input with Low Pass Filter Module (Gray Cover) (RoHS)
<b>I-8053W-A1-G CR</b>	16-channel Isolated Digital Input Module (Gray Cover) (RoHS)