



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

16-channel Isolated Digital Input Module

Features

- 16-channel Digital Inputs
- Dry and Wet Contact, Selectable via Wire Connections
- Photocouple Isolation
- Long Distance Measurement
- 4 kV ESD Protection
- 3750 Vdc Intra-module Isolation
- Wide Operating Temperature Range: -25 ~ +75 °C



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 Vrms 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.

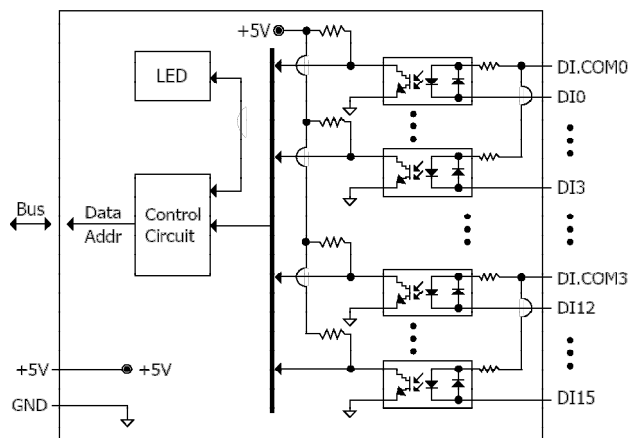
System Specifications

Model	I-8053W	I-8053PW	I-8053W-A1
LED Indicators/Display			
System LED Indictors	1 LED as Power Indicator		
I/O LED Indicators	16 LEDs as Digital Input Indicators		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 Vrms		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal		
Power			
Power Consumption	0.4 W Max.		
Mechanical			
Dimensions (W x L x H)	30 mm x 102 mm x 115 mm		
Environment			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 90% RH, Non-condensing		

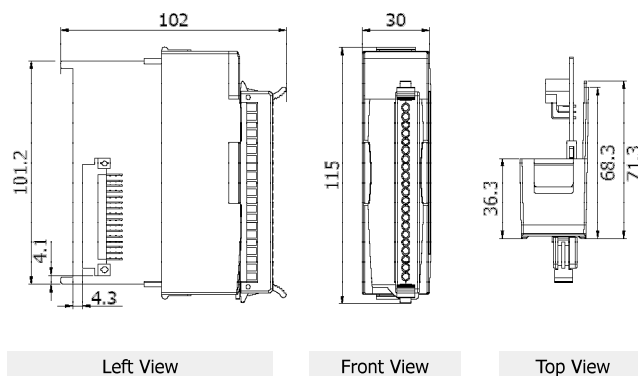
I/O Specifications

Model	I-8053W	I-8053PW	I-8053W-A1
Digital Input			
Channels	16		
Type	Four Commons for All Inputs		
Sink/Source (NPN/PNP)	Sink, Source		
ON Voltage Level	+10 ~ +30 VDC	+10 ~ +30 VDC	+3.5 ~ +30 VDC
Off Voltage Level	+4 VDC max.	+1 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



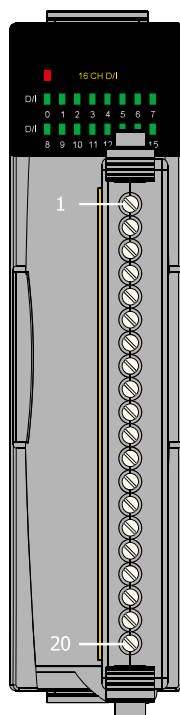
Dimensions (Units: mm)



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 	Voltage < 4 V
NPN Output	Open Collector ON 	Open Collector OFF
PNP Output	Open Collector ON 	Open Collector OFF

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	DI11
16	DI.COM3
17	DI12
18	DI13
19	DI14
20	DI15

Ordering Information

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