

I-87053W | I-87053PW | I-87053W-A2

16-channel Isolated Digital Input Module with 16-bit Counters

Features

- 16-channel Digital Inputs
- Dry and Wet Contact, Selectable via Wire Connections
- Photocouple Isolation
- Long Distance Measurement
- 4 kV ESD Protection
- All Channels can be used as 16-bit Counters
- 3750 VDC Intra-module Isolation

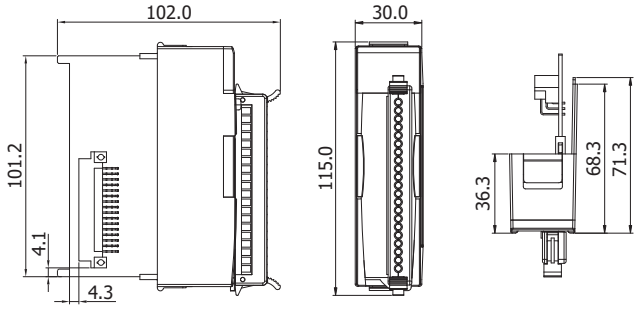
Introduction

The I-87053W, I-87053PW and I-87053W-A2 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. All channels feature photocouple isolation, and can also be used as 16-bit counters. The I-87053W 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 "A2" version of the digital input module for industrial use.

Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

Dimensions



Left View | Front View | Top View

System Specifications

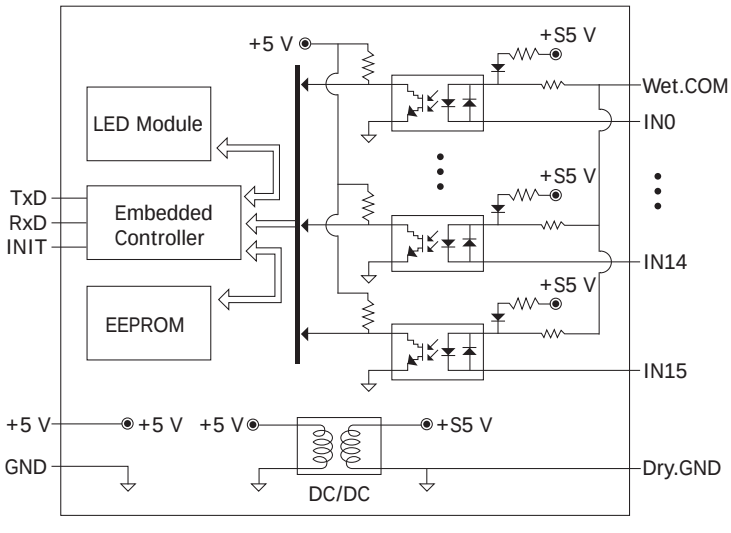
Model	I-87057W	I-87057PW	I-87057W-A2
COM Port			
Ports	RS-485		
Data Format	N, 8, 1		
Baud Rate	1200 ~ 115200 bps		
Protocol	DCON		
CPU Module			
Dual Watchdog Timer	Module (1.6 Seconds), Communication (Programmable)		
LED Indicators			
System LED Indicator	1 LED as Power Indicator		
I/O LED Indicator	16 as High/Low Alarm Signals		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 VDC		
EMS Protection			
ESD (IEC 61000-4-2)	±4 kV Contact for Each port, ±8 kV Air for Random Poin		
Power			
Consumption	0.8 W Max.		
Mechanical			
Dimensions (W x L x H)	30 mm x 115 mm x 102 mm		
Environment			
Operating Temperature	-25 ~ +75 °C		
Storage Temperature	-40 ~ +85 °C		
Humidity	10 ~ 95 % RH, Non-condensing		

I/O Specifications

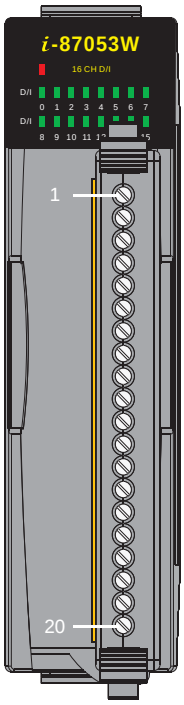
Model		I-87057W	I-87057PW	I-87057W-A2
Digital Input/Counter				
Channels		16		
Type		Dry, Wet		
Sink/Source (NPN/PNP)		Sink, Source		
Dry Contact	On Voltage Level	Close to GND.		
	Off Voltage Level	Open		
Wet Contact	On Voltage Level	+3.5 ~ +30 VDC	+19 ~ +30 VDC	+19 ~ +50 VDC
	Off Voltage Level	+1 VDC Max.	+11 VDC Max.	
Input Impedance		3 kΩ, 1 W		10 kΩ, 1 W
Max. Counts		16-bit (65535)		
Frequency		100 Hz		
Min. Pulse Width		5 ms		
Effective Distance		500 m Max.		
Low Pass Filter		Yes		
Overvoltage Protection		50 VDC		100 VDC

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Internal I/O Structure

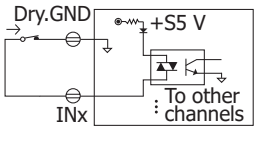
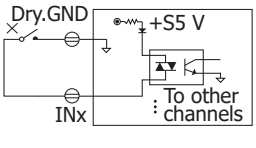


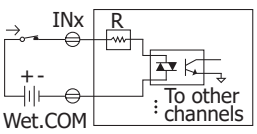
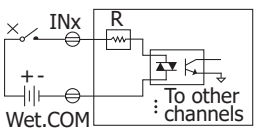
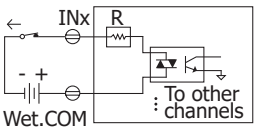
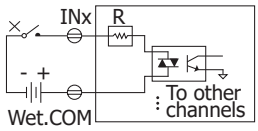
Pin Assignments



Terminal No.	Pin Assignment
01	IN0
02	IN1
03	IN2
04	IN3
05	IN4
06	IN5
07	IN6
08	IN7
09	IN8
10	IN9
11	IN10
12	IN11
13	IN12
14	IN13
15	IN14
16	IN15
17	Wet.COM
18	Wet.COM
19	Dry.GND
20	Dry.GND

Wire Connections

Input Type	On State Readbackas 1	OFF State Readbackas 0
	Close to GND	Open
Dry Contact		

Input Type	Model	On State Readbackas 1		OFF State Readbackas 0	
Wet Contact (Sink)	I-87053W	+3.5 VDC ~ +30 VDC		+1 VDC Max.	
	I-87053PW	+19 VDC ~ +30 VDC		+11 VDC Max.	
	I-87053W-A2	+19 VDC ~ +50 VDC		+11 VDC Max.	
Wet Contact (Source)	I-87053W	+3.5 VDC ~ +30 VDC		+1 VDC Max.	
	I-87053PW	+19 VDC ~ +30 VDC		+11 VDC Max.	
	I-87053W-A2	+19 VDC ~ +50 VDC		+11 VDC Max.	

Accessories

SG-770 CR	16-channel Isolated Digital Input Module with 16-bit Counters (Gray Cover) (RoHS)

Ordering Information

I-87053W-G CR	16-channel Isolated Digital Input Module with 16-bit Counters (Gray Cover) (RoHS)
I-87053PW-G CR	16-channel Isolated Digital Input Module with 16-bit Counters (Gray Cover) (RoHS)
I-87053W-A2-G CR	16-channel Isolated Digital Input Module with 16-bit Counters (Gray Cover) (RoHS)

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