



I-7051/I-7051D

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

Introduction

I-7051 offers 16 channels for digital input which cover dry contact and wet contact as well. Its effective distance for dry contact is up to 500 meters. All of its channels are not only with isolation but also able to be used as 16-bit counters. I-7051D has 16 LED indicators for DI channel status. 4KV ESD protection and 3750V intra-module isolation are standard.

Digital Input

Features

- Dry Contact and Wet Contact By Wire Connection
- Photocouple Isolation
- Long Distance Measurement
- Can Be Used As Counters
- 4KV ESD Protection
- 3750 V_{rms} Isolation Voltage
- Dual Watchdog
- RoHS Compliance
- Wide Range of Operating Temperature: -25 ~ +75 °C



Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote diagnosis, Testing Equipment.

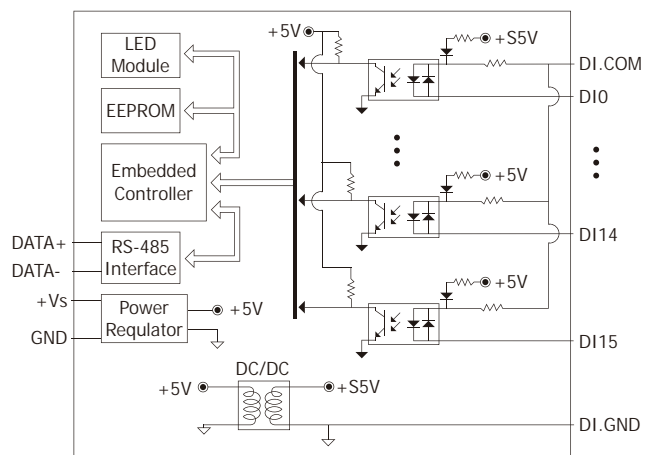
I/O Specifications

Digital Input		
Input Channels	16	
Input Type	Dry Contact	Source
	Wet Contact	Sink or Source
Dry Contact Level	Off Voltage Level	Open
	On Voltage Level	Close to GND
Effective Distance	500 M Max. for Dry Contact	
Wet Contact Level	Off Voltage Level	+4 V Max.
	On Voltage Level	+10 V _{DC} ~ +50 V _{DC}
Input Impedance	10 kΩ, 0.5W	
Counters	Channels	16
	Max. Counters	16-bit (65535)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Over-Voltage Protect	70 V _{DC}	
Photo-isolation	3750 V _{rms}	

System Specifications

Interface		
Interface	RS-485	
Format	N, 8, 1	
Baud Rate	1200 ~ 115200 bps	
LED Display	1 LED as Power/Communication indicator	
	16 LEDs as digital input indicators (for I-7051D)	
Power		
Input Voltage Range	+10 V _{DC} ~ +30 V _{DC}	
Power	I-7051	0.5 W
Consumption	I-7051D	2.8 W
Environment		
Operating temperature	-25 °C ~ +75 °C	
Storage temperature	-40 °C ~ +85 °C	
Humidity	10 ~ 95% RH, non-condensing	
Dimensions	72 mm x 120 mm x 35 mm (W x L x H)	

Internal I/O Structure

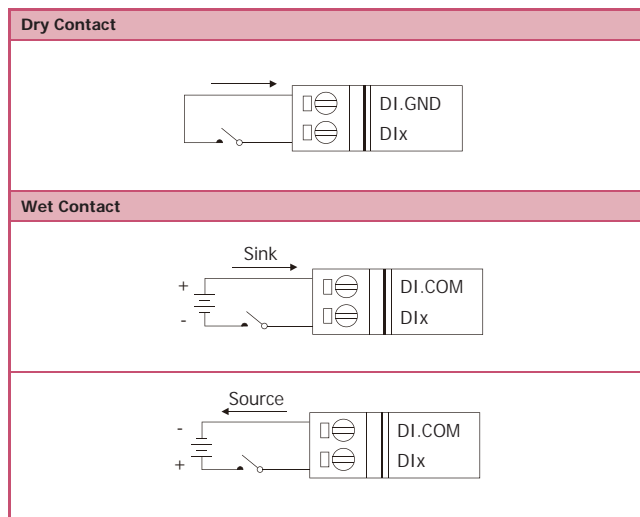


Pin Assignment

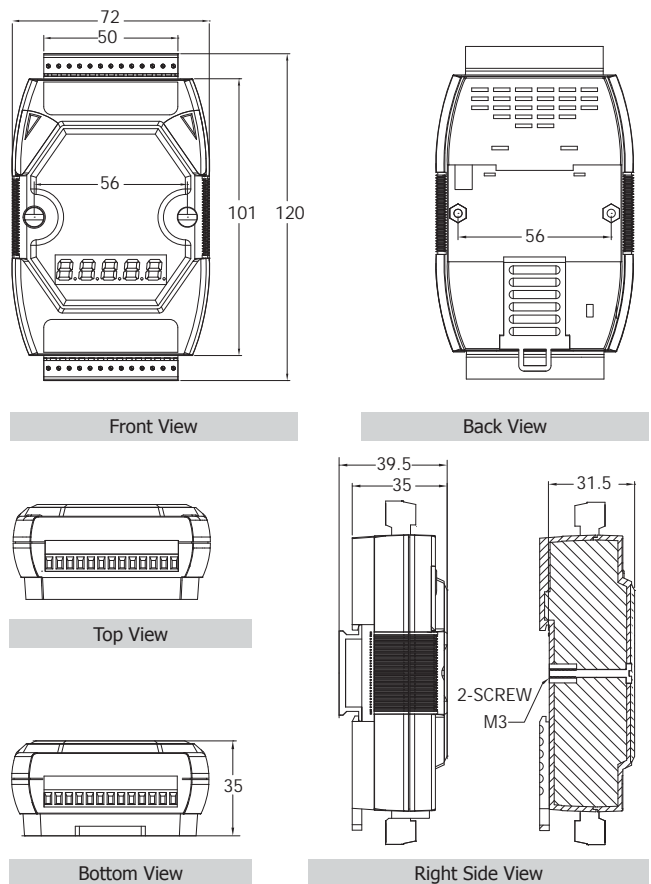
Terminal No.	Pin Assignment
01	DI.GND
02	DI11
03	DI12
04	DI13
05	DI14
06	DI15
07	DI.COM
08	(Y)DATA+
09	(G)DATA-
10	(Y)DATA+
11	(G)DATA-
12	(R)+Vs
13	(B)GND

Terminal No.	Pin Assignment
26	DI.GND
25	DI10
24	DI9
23	DI8
22	DI7
21	DI6
20	DI.COM
19	DI5
18	DI4
17	DI3
16	DI2
15	DI1
14	DI0

Wire Connection



Dimensions (Unit: mm)



Ordering Information

I-7051 CR	16-channel Isolated Digital Input Module with 16-bit Counters (RoHS)
I-7051D CR	I-7051 with LED Display (RoHS)

Related Products

Converters	USB, RS-232, Fiber Optical to RS-485 Converters and Repeaters	Learning Kit	Starter Learning Kit
Power Supply	24 V _{DC} Power Supply	Application Books	Application Books Designed with Our Products
Relay Module	External Relay Modules for I-7000 DO Module	Data Logger Software	User Friendly Data Logger Software (free)