



**I-87051**      **I-87051-G**  
 16-ch Non-isolated DI (Dry) Module

### Features

- 16-channel Digital Input
- Dry Contact Digital Input Channels
- All Channels can be used as 16-bit Counters
- All Channels Non-isolated



### Introduction

The I-87051 is a 16-channel Digital Input module for dry contact wire connections. All channels can be used as 16-bit counters. The I-87051 also includes 16 LED indicators that can be used to monitor the status of the Digital Input channels.

### Applications

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

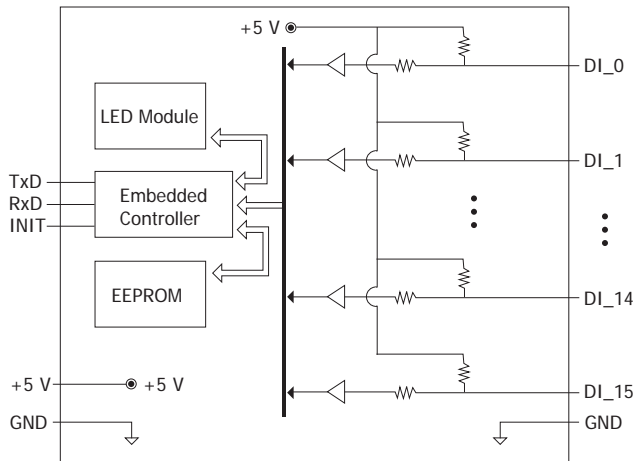
### System Specifications

CPU Module	
Watchdog Timer	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicators	
Status	1 x Power and Communication 16 x I/O
COM Ports	
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	DCON
Power	
Power Consumption	0.9 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 116 mm x 88 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-30 ~ +75 °C
Humidity	5 ~ 95% RH, Non-condensing

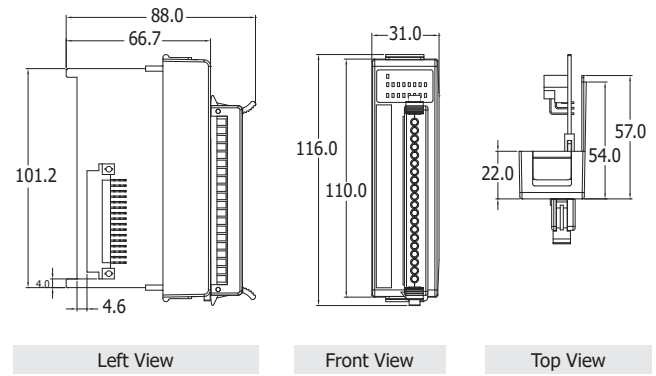
### I/O Specifications

Digital Input	
Low Pass Filter	Yes
Digital Input/Counter	
Channels	16
Type	Dry Contact
Sink/Source (NPN/PNP)	Source
Dry Contact, ON Voltage Level	Close to GND
Dry Contact, OFF Voltage Level	Open
Max. Counts	16-bit (65535)
Frequency	100 Hz
Min. Pulse Width	5 ms

## Internal I/O Structure



## Dimensions (Units: mm)



## Wire Connections

Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
	Close to GND (+1 VDC Max.)	OPEN (+4 VDC ~ +30 VDC)
Dry Contact		

## Pin Assignments

Terminal No.	Pin Assignment
01	DI0
02	DI1
03	DI2
04	DI3
05	DI4
06	DI5
07	DI6
08	DI7
09	DI8
10	DI9
11	DI10
12	DI11
13	DI12
14	DI13
15	DI14
16	DI15
17	GND
18	GND
19	GND
20	GND

## Ordering Information

<b>I-87051 CR</b>	16-ch Non-isolated DI (Dry) Module (Blue Cover) (RoHS)
<b>I-87051-G CR</b>	16-ch Non-isolated DI (Dry) Module (Gray Cover) (RoHS)