



## I-87052

8-ch Isolated DI (3.5 ~ 30 V<sub>DC</sub>) Module

## I-87052-G

### Features

- 8-channel Isolated Digital Input
- 2 kV Channel-to-Channel Isolation
- Sink- or Source-type Input
- 5000 V<sub>rms</sub> Isolation Voltage
- All Channels can be used as 16-bit Counters



### Introduction

The I-87052 module offers 8 fully independent differential Digital Input channels that feature 2 kV channel-to-channel Photocouple isolation. In addition, either sink- or source-type input can be selected via the wire connections, while all channels are able to be used as 16-bit counters. The I-87052 also includes 8 LED indicators that can be used to monitor the status of the Digital Input channels. 5000 V<sub>rms</sub> intra-module isolation are provided as standard.

### Applications

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

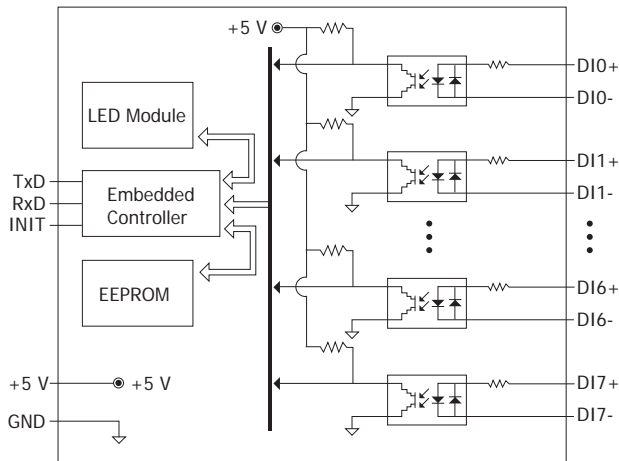
### System Specifications

CPU Module	
Watchdog Timer	Yes, Module (1.6 Seconds), Communication (Programmable)
Isolation	
Intra-module Isolation	5000 V <sub>rms</sub>
LED Indicators	
Status	1 x Power and Communication 8 x I/O
COM Ports	
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	DCON
Power	
Power Consumption	0.3 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

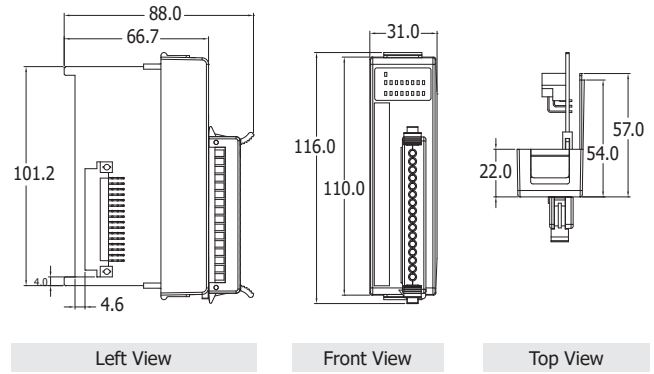
### I/O Specifications

Digital Input	
Low Pass Filter	Yes
Digital Input/Counter	
Channels	8
Type	Wet, Differential
Sink/Source (NPN/PNP)	Sink, Source
Wet Contact, ON Voltage Level	+3.5 V <sub>DC</sub> ~ 30 V <sub>DC</sub>
Wet Contact, OFF Voltage Level	+1 V <sub>DC</sub> Max.
Max. Counts	16-bit (65535)
Frequency	100 Hz
Min. Pulse Width	5 ms
Input Impedance	3 kΩ, 0.25 W
Channel-to-Channel Isolation	Yes, 2 kV

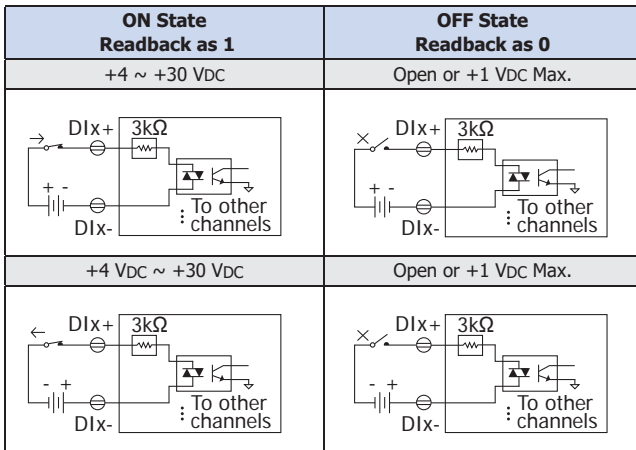
## Internal I/O Structure



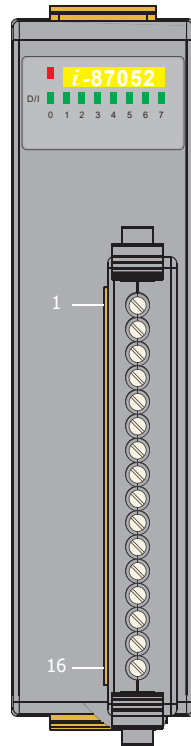
## Dimensions (Units: mm)



## Wire Connections



## Pin Assignments



Terminal No.	Pin Assignment
01	DI0+
02	DI0-
03	DI1+
04	DI1-
05	DI2+
06	DI2-
07	DI3+
08	DI3-
09	DI4+
10	DI4-
11	DI5+
12	DI5-
13	DI6+
14	DI6-
15	DI7+
16	DI7-

## Ordering Information

<b>I-87052 CR</b>	8-ch Isolated DI (Wet, 3.5 ~ 30 V <sub>DC</sub> ) Module with 2 kV Channel-to-channel Isolation (Blue Cover) (RoHS)
<b>I-87052-G CR</b>	8-ch Isolated DI (Wet, 3.5 ~ 30 V <sub>DC</sub> ) Module with 2 kV Channel-to-channel Isolation (Gray Cover) (RoHS)