



**I-87017**      **I-87017-G**  
8-ch AI Module

### Features

- 8-channel Analog Input
- Voltage or Current Input
- $\pm 35$  Vdc Overvoltage Protection
- Adjustable Sampling Rate
- 3000 Vdc Intra-module Isolation



### Introduction

The I-87017 is an analog input module with an extremely high-quality protection mechanism where the overvoltage protection can be as high as  $\pm 35$  V<sub>DC</sub>. The input type can be set to either voltage or current. The sampling rate for the I-87017 is can be adjusted to either fast mode or normal mode. The I-87017 also provides 3000 V<sub>DC</sub> intra-module isolation.

### Applications

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

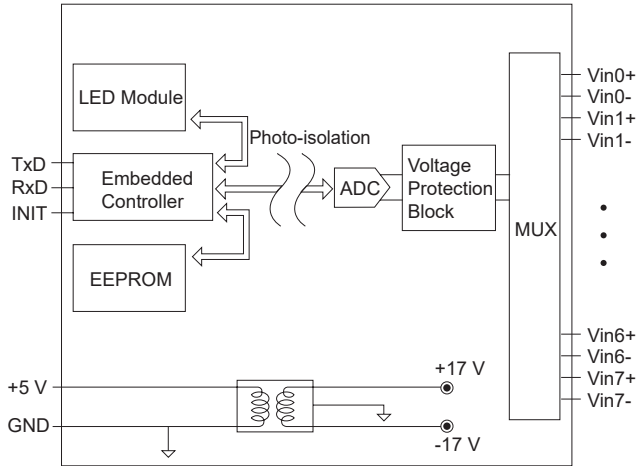
### System Specifications

COM Ports	
Baud Rate	115200 bps
Data Format	N, 8, 1
Protocol	DCON
Isolation	
Intra-module Isolation	3000 V <sub>DC</sub>
LED Indicators	
Status	1 x Power and Communication 16 x I/O
Isolation	
Intra-module Isolation, Field-to-Logic	3000 V <sub>DC</sub>
Power	
Power Consumption	1.1 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

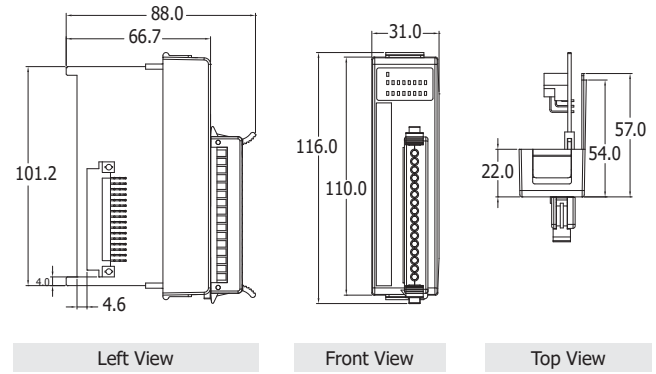
### I/O Specifications

Analog Input		
Channels	8	
Type	Voltage Current	
Range	$\pm 10$ V <sub>DC</sub> , $\pm 5$ V <sub>DC</sub> , $\pm 1$ V <sub>DC</sub> $\pm 500$ mV, $\pm 150$ mV $0 \sim +20$ mA, $+4 \sim +20$ mA, $-20$ mA $\sim +20$ mA (Requires Optional External 125 $\Omega$ Resistor)	
Resolution	16-bit	
Accuracy	Normal Mode	$\pm 0.1\%$ of FSR
	Fast Mode	$\pm 0.5\%$ of FSR
Sampling Rate	Normal Mode	10 Hz (Total)
	Fast Mode	50 Hz (Total)
-3dB Bandwidth	Normal Mode	15.7 Hz
	Fast Mode	78.7 Hz
Input Impedance	20 M $\Omega$	
Span Drift	$\pm 25$ ppm/°C	
Common Mode Rejection	86 dB	
Overvoltage Protection	-35 V <sub>DC</sub> $\sim$ +35 V <sub>DC</sub>	

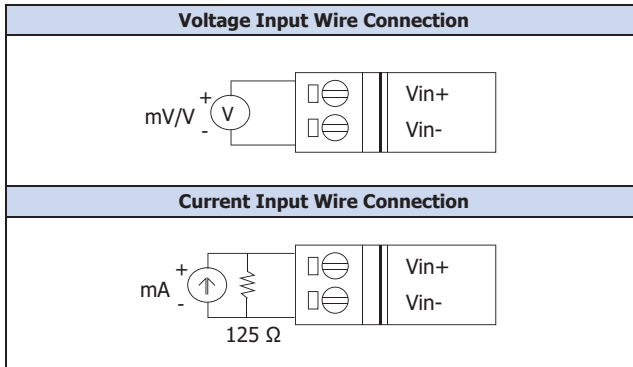
## Internal I/O Structure



## Dimensions (Units: mm)

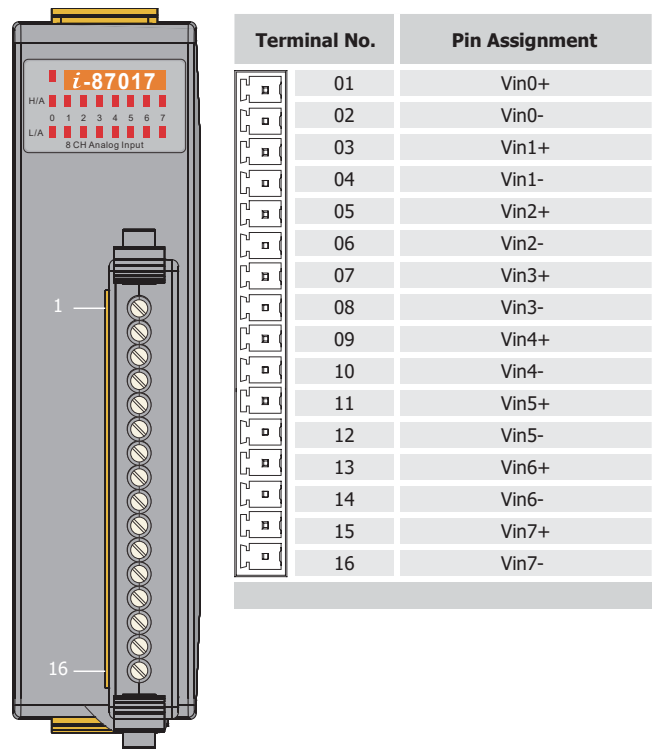


## Wire Connections



Note: When connecting to a current source, an optional external 125 Ω resistor is required.


## Pin Assignments



## Ordering Information

<b>I-87017 CR</b>	8-ch AI Module (Blue Cover) (RoHS)
<b>I-87017-G CR</b>	8-ch AI Module (Gray Cover) (RoHS)

## Accessories

	2AB125R	125 Ω, 0.1% DIP Resistor used for Current Type Input Modules
---	---------	--