



**I-8017H**      **I-8017H-G**  
8-ch AI Module

### Features

- 8 Differential Analog Inputs
- Voltage or Current Input
- 14-bit 100 kHz AD Converter
- Internal/External Trigger
- Individual Channel Configuration
- ±4 kV ESD Protection
- 2500 Vdc Intra-module Isolation



### Introduction

The I-8017H is a 8 differential input Analog Input Module. This 8 differential input channels are provided with 14-bit of resolution and 90 kS/s sampling rate. Each channel can be configured to an individual input range of ±10 VDC, ±5 VDC, ±2.5 VDC, ±1.25 VDC or ±20 mA. The modules also provide ±4 kV ESD protection as well as 2500 VDC intra-module isolation. All the three modules can be used to measure voltage and current source. On the I-8017H, an external 125 Ω resistor is needed to measure current source.

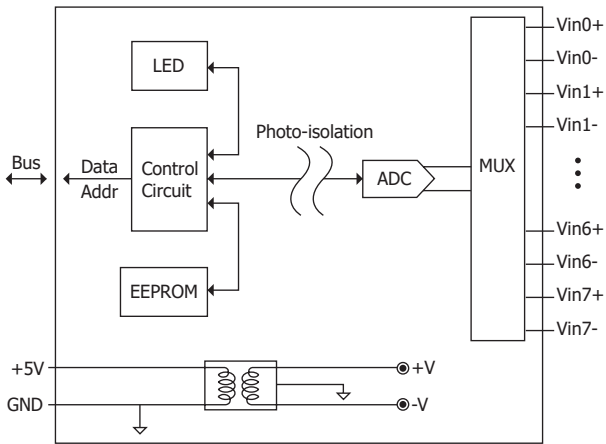
### System Specifications

LED Indicators/Display	
System LED Indicator	1 LED as Power Indicator
I/O LED Indicator	16 LEDs as Status Indicator
Isolation	
Intra-module Isolation, Field-to-Logic	2500 Vdc
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	2 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm x 116 mm x 88 mm
I/O Connector	16 Pin Terminal Block
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

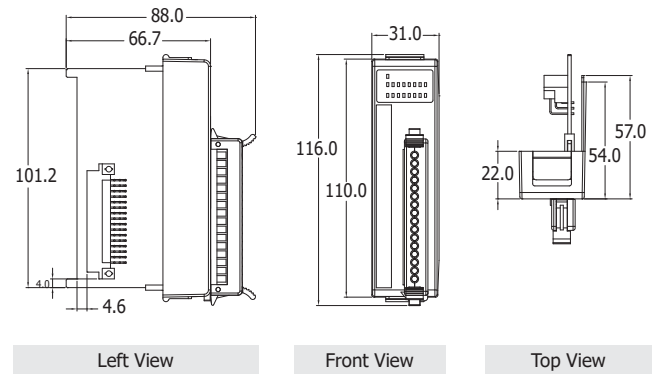
### I/O Specifications

Analog Input	
Channels	8-ch Differential
Range	Voltage: ±10 VDC, ±5 VDC, ±2.5 VDC, ±1.25 VDC Current: ±20 mA, Requires Optional External 125 Ω Resistor
Resolution	14-bit
Sample Rate	Single Channel Polling Mode: 100 kS/s Single Channel Interrupt Mode: 50 kS/s 8 channel Scan Mode: 16 kS/s
Input Impedance	20 K, 200 K, 20 M (Jumper Selectable)
Individual Channel Configuration	Yes

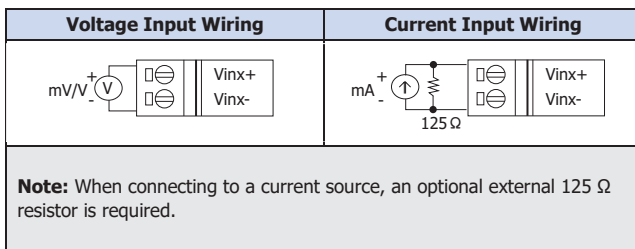
## Internal I/O Structure



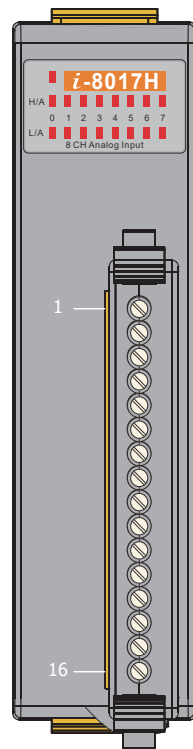
## Dimensions (Units: mm)



## Wire Connections



## Pin Assignments



Terminal No.	Pin Assignment
01	Vin0+
02	Vin0-
03	Vin1+
04	Vin1-
05	Vin2+
06	Vin2-
07	Vin3+
08	Vin3-
09	Vin4+
10	Vin4-
11	Vin5+
12	Vin5-
13	Vin6+
14	Vin6-
15	Vin7+
16	Vin7-

## Ordering Information

<b>I-8017H CR</b>	8-ch AI Module with 16-Pin Terminal Block (Current Input Mode: Requires Optional External 125 Ω Resistor) (Blue Cover) (RoHS)
<b>I-8017H-G CR</b>	8-ch AI Module with 16-Pin Terminal Block (Current Input Mode: Requires Optional External 125 Ω Resistor) (Gray Cover) (RoHS)

## Accessories

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