



I-87017W-G I-87017RW-G

8-channel Analog Input Module

Introduction

The I-87017RW is an analog input module with an extremely high-quality protection mechanism where the overvoltage protection can be as high as 240 Vrms. The input type can be set to either voltage or current. The I-87017RW is an upgraded version of I-87017W, with the only differences being that the I-87017RW is more suitable for critically harsh environment. The sampling rate for the I-87017RW is can be adjusted to either fast mode or normal mode depending on individual requirements. The I-87017RW also provides 4 kV ESD protection as well as 3000 Vdc intra-module isolation.

System Specifications

Model	I-87017W	I-87017RW
Communication		
Interface	RS-485	
Format	N, 8, 1	
Baud Rate	1200 to 115200 bps	
Protocol	DCON	
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)	
LED Indicators/Display		
System LED Indicators	Yes, 1 as Power/Communication Indicator	
I/O LED Indicators	16 as High/Low Alarm Signals	
Isolation		
Intra-module Isolation, Field-to-Logic	3000 Vdc	
EMS Protection		
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal	
	±8 kV Air for Random Point	
Power		
Power Consumption	1.3 W Max.	
Mechanical		
Dimensions (W × L × H)	30 mm × 115 mm × 102 mm	
Environment		
Operating Temperature	-25 to +75°C	
Storage Temperature	-40 to +85°C	
Humidity	10 to 95% RH, Non-condensing	

Features

- 8-channel Analog Input
- Voltage or Current Input
- Overvoltage Protection
 - I-87017W: +/-35 VDC
 - I-87017RW: 240 Vrms
- Adjustable Sampling Rate
- 4 kV ESD Protection
- 3000 Vdc Intra-module Isolation



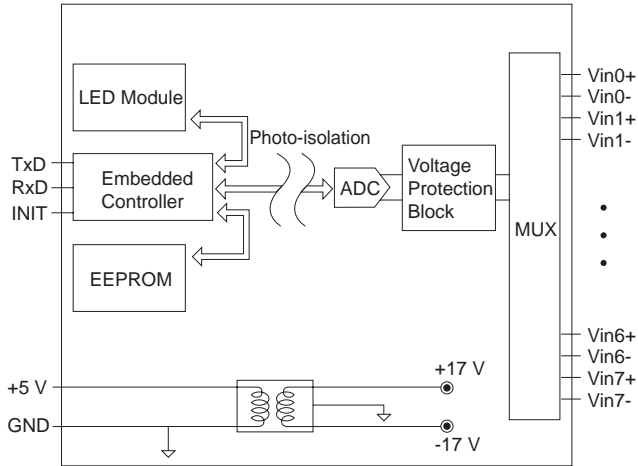
Applications

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

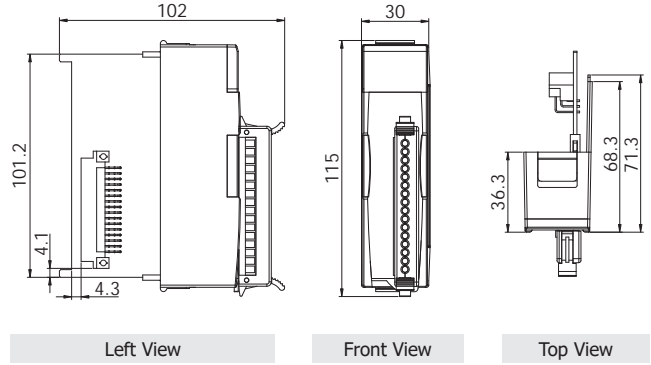
I/O Specifications

Model	I-87017W	I-87017RW
Analog Input		
Channels	8	
Wiring	Differential	
Range	±10 Vdc, ±5 VDC, ±1 VDC ±500 mV, ±150 mV 0 ~ +20 mA, +4 ~ +20 mA, -20 mA ~ +20 mA (Requires Optional External 125 Ω Resistor)	
Resolution	16-bit	
Accuracy	Normal Mode	±0.1% of FSR
	Fast Mode	±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
Zero Drift	±20 μV/°C	
Span Drift	±25 ppm/°C	
Common Mode Rejection	86 dB	
Normal Mode Rejection	100 dB	
Input Impedance	20 MΩ	>2 MΩ
Overvoltage Protection	-35 VDC ~ +35 VDC	240 Vrms

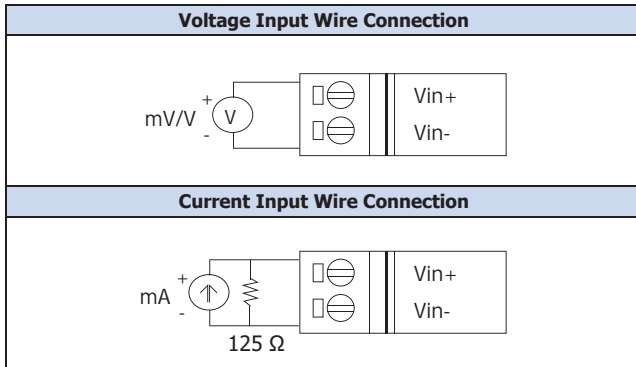
Internal I/O Structure



Dimensions (Units: mm)

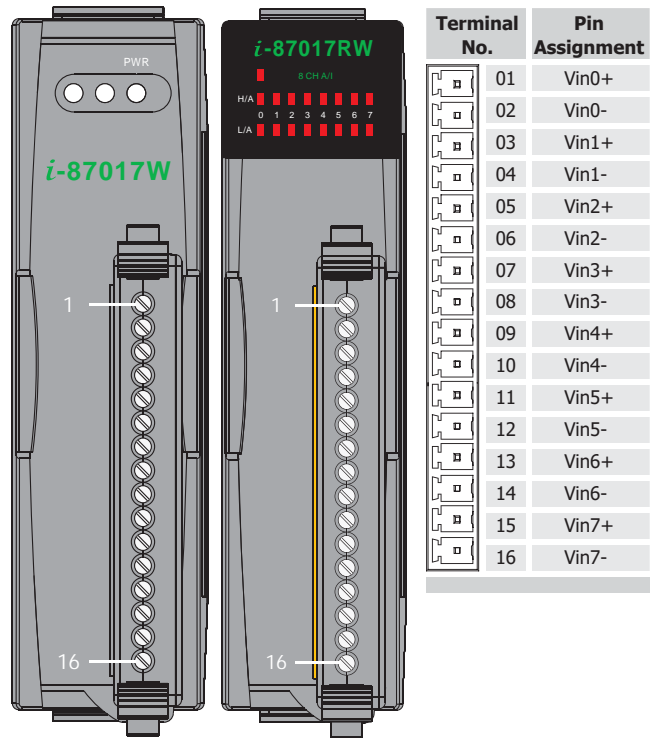


Wire Connections



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

Pin Assignments



Ordering Information

I-87017W-G CR	8-channel Analog Input Module (Gray Cover) (RoHS)
I-87017RW-G CR	8-channel Analog Input Module with High Overvoltage Protection(Gray Cover) (RoHS)

Accessories

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