



### Features

- High Voltage Input: -150 V ~ +150 V
- Changeable Sampling Rate
- 4 kV ESD Protection
- 3000 V<sub>dc</sub> Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 ~ +75°C



### Introduction

I-87017W-A5 is specially designed for high voltage input. Its input range is up to -150 V ~ +150 V. The sampling rate of I-87017W-A5 is changeable; there are fast mode and normal mode for your consideration. I-87017W-A5 also has qualification for 4 KV ESD protection as well as 3000 V<sub>dc</sub> intra-module isolation.

### Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.

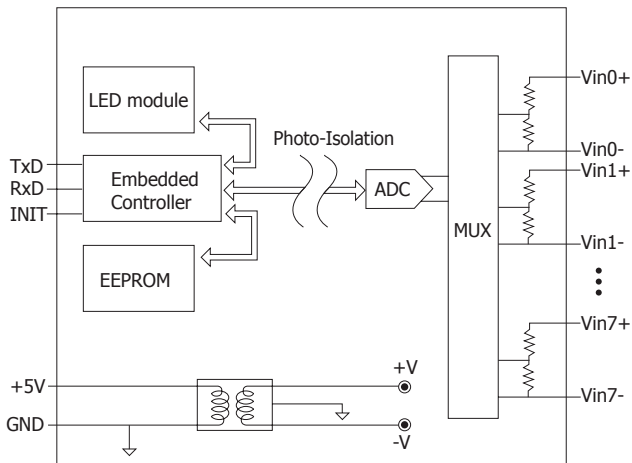
### System Specifications

Communication	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicator/Display	
System LED Indicator	1 LED as Power/Communication Indicator
I/O LED Indicator	16 LEDs as High/Low Alarm Signals
Isolation	
Intra-Module Isolation, Field-to-Logic	3000 V <sub>dc</sub>
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 x L x H)	30 mm x 102 mm x 115 mm
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 95% RH, Non-condensing

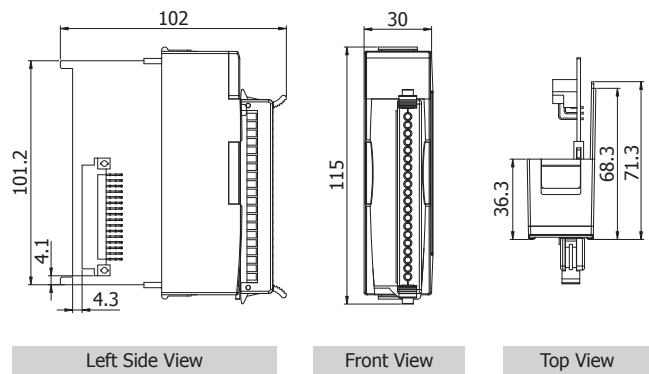
### I/O Specifications

Analog Input		
Channels	8	
Wiring	Differential	
Range	+/-50 V <sub>dc</sub> , +/-150 V <sub>dc</sub>	
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Accuracy	Normal Mode	+/- 0.1% of FSR
	Fast Mode	+/- 0.25% of FSR
Sampling Rate	Normal Mode	16-bit, 10 Hz (Total)
	Fast Mode	12-bit, 50 Hz (Total)
-3dB Bandwidth	15.7 Hz	
Zero Drift	+/- 20 μV/°C	
Span Drift	+/- 25 ppm/°C	
Common Mode Rejection	86 dB	
Normal Mode Rejection	100 dB	
Input Impedance	290 KΩ	
Overvoltage Protection	-200 V <sub>dc</sub> ~ +200 V <sub>dc</sub>	

### Internal I/O Structure



### Dimensions (Units: mm)

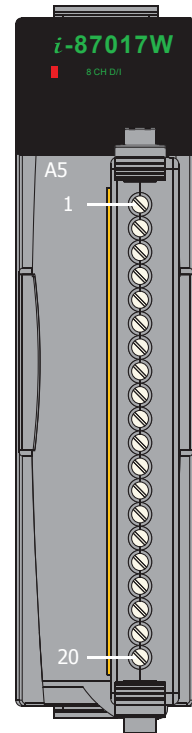


### Wire Connections

**Voltage Input Wire Connection**

TYPE	SIGNAL
1B	± 150 V
1C	± 50 V

### 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-
17	AGND
18	AGND
19	FG
20	FG

### Ordering Information

<b>I-87017W-A5-G CR</b>	8-channel High Voltage Input Module (Gray Cover) (RoHS)
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### Accessories

	<b>SG-770 CR</b> 7 channel differential or 14 channel single-ended surge protector (RoHS)
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