



Features

- Current Input
- With a Built-in Resistor, Measuring the Current is As Simple As You Think!
- Changeable Sampling Rate
- Open Wire Detection for +4 ~ +20 mA
- 4 kV ESD Protection
- 3000 V_{DC} Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 ~ +75°C



Introduction

I-87017RCW measures current only. Its user-friendly design saves a lot of work when measuring current due to a built-in resistor. Now, you can measure current directly! The sampling rate of I-87017RCW is changeable; there are fast mode and normal mode for your consideration. I-87017RCW also has qualification for 4 KV ESD protection as well as 3000 V_{DC} intra-module isolation.

Applications

Current Measuring, Voltage Measuring, Environment Monitoring, Tunnel Monitoring, Building Monitoring etc.

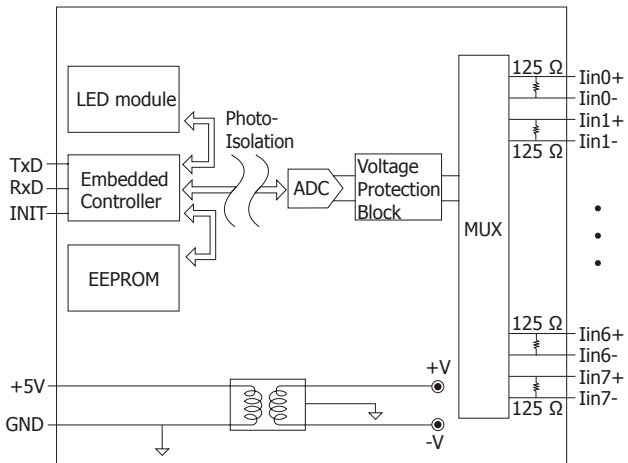
System Specifications

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 _{DC}
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

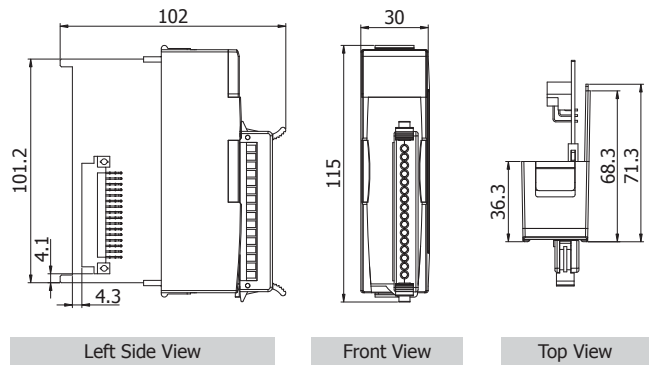
I/O Specifications

Analog Input		
Channels	8	
Wiring	Differential	
Range	0 ~ +20 mA, +4 ~ +20 mA, -20 mA ~ +20 mA (No External Resistor Required)	
Resolution	Normal Mode	16-bit
	Fast Mode	12-bit
Accuracy	Normal Mode	+/- 0.1% of FSR
	Fast Mode	+/- 0.5% of FSR
Sampling Rate	Normal Mode	16-bit, 10 Hz (Total)
	Fast Mode	12-bit, 60 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	125 Ω	
Common Voltage Protection	-200 V _{DC} ~ +200 V _{DC}	
Open Wire Detection	Yes, for +4 ~ +20 mA	
Overvoltage Protection	-	

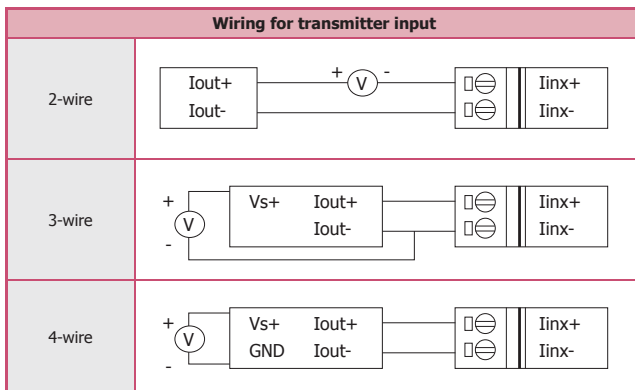
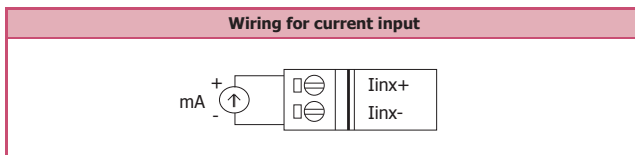
Internal I/O Structure



Dimensions (Units: mm)

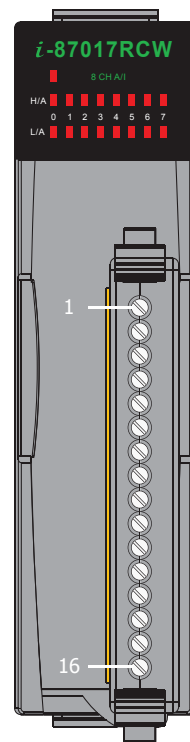


Wire Connections



TYPE	0D	07	1A
SIGNAL	+/-20 mA	+4 ~ +20 mA	0 ~ +20 mA

Pin Assignments



Terminal No.	Pin Assignment
01	Iin0+
02	Iin0-
03	Iin1+
04	Iin1-
05	Iin2+
06	Iin2-
07	Iin3+
08	Iin3-
09	Iin4+
10	Iin4-
11	Iin5+
12	Iin5-
13	Iin6+
14	Iin6-
15	Iin7+
16	Iin7-

Ordering Information

I-87017RCW-G CR	8-channel Current Input Module (Gray Cover) (RoHS) Art. No. 121698
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Accessories

DN-843V-600V CR	3-channel 600 V voltage attenuator (RoHS)
DN-848VI-80V CR	8-channel 80 V voltage attenuator (RoHS)
DN-848VI-150V CR	8-channel 150 V voltage attenuator (RoHS)
DN-843I-CT-1 CR	3-channel 1 A Current Transformer (RoHS)

DN-843I-CT-50 CR	3-channel 50 A Current Transformer (RoHS)
SG-770 CR	7 channel differential or 14 channel single-ended surge protector (RoHS)
SG-3000 series	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Inputs