

I-7017C



M-7017C



I-7017FC



I-7017RC



M-7017RC

8-ch Current Input Module

Features

- Current Input Only
- Built-in Resistor to Simplify Current Measurement
- I-7017FC, I-7017RC, and M-7017RC
  - Adjustable Sampling Rate (Fast/Normal Mode)
- I-7017RC and M-7017RC
  - High Common Voltage Protection
- Open Wire Detection for 4 ~ 20 mA input

Introduction

The I-7017C is an 8-channel current input module that is specifically designed to measure current only. Its user-friendly design saves both time and effort when measuring a current thanks to a built-in resistor, meaning that you can now measure current directly. The I-7017RC is an upgraded version of the I-7017C, with the only difference being that the I-7017RC is much more suitable for critically harsh environments. The I-7017RC also has 4 kV ESD protection and +/- 200 VDC common voltage as current input protection, and also features 3000 VDC intra-module isolation and open wire detection for 4 ~ 20 mA input. The sampling rate of the I-7017RC and I-7017FC is adjustable, meaning that either fast mode or normal mode can be selected. The M-7017C and M-7017RC has the same specifications as the I-7017C and I-7017RC, but provides additional support for the Modbus RTU protocol as well as the DCON protocol.

System Specifications

Model	I-7017C I-7017FC I-7017RC	M-7017C M-7017RC
CPU Module		
Watchdog Timer	Module, Communication (Programmable)	
Isolation		
Intra-module Isolation	3000 VDC	
EMS Protection		
EFT (IEC 61000-4-4)	±4 kV for Power Line	
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal	
Surge (IEC 61000-4-5)	±0.5 kV for Power Line	
LED Indicators		
Status	1 x Power and Communication	
COM Ports		
Ports	1 x RS-485	
Baud Rate	1200 ~ 115200 bps	
Data Format	(N, 8, 1), (N, 8, 2), (E, 8, 1), (E, 8, 2)	
Protocol	DCON	Modbus RTU, DCON
Power		
Reverse Polarity Protection	Yes	
Input Range	+10 ~ +30 VDC	
Consumption	1.3 W	
Mechanical		
Dimensions (mm)	72 x 123 x 35 (W x L x H)	
Installation	DIN-Rail Mounting	

Applications

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

I/O Specifications

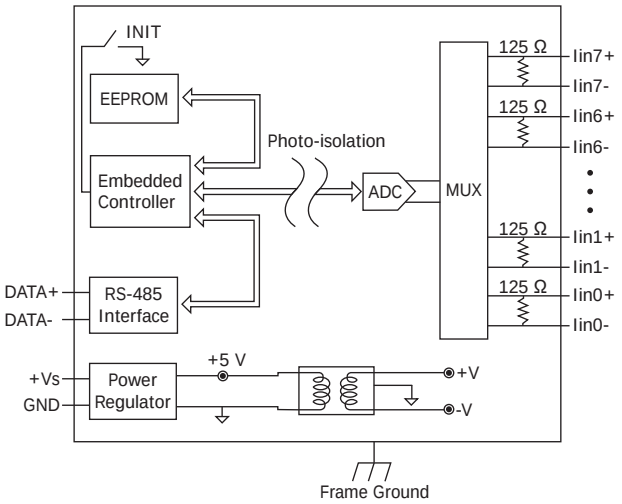
Model		I-7017C M-7017C	I-7017FC	I-7017RC M-7017RC
Analog Input				
Channels		8 Differential		
Type		Current		
Range		±20 mA, 0 ~ 20 mA, 4 ~ 20 mA		
Resolution		16-bit		
Accuracy	Normal Mode	±0.1% of FSR		
	Fast Mode	-	±0.5% of FSR	
Sampling Rate	Normal Mode	10 Hz		
	Fast Mode	-	60 Hz	
Input Impedance		125 Ω		
Common Voltage Protection		±15 VDC		±200 VDC
Overcurrent Protection		50 mA at 110 VDC		
Channel-to-Channel Isolation		-		400 VDC
Open Wire Detection		For 4 ~ 20 mA Only		

Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 95% RH, Non-condensing

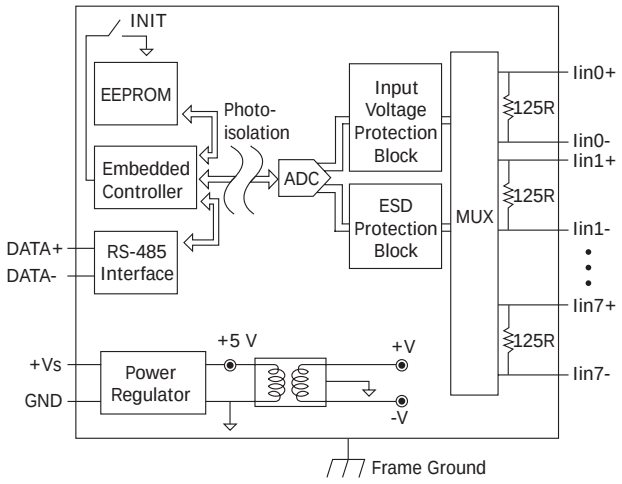
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Internal I/O Structure

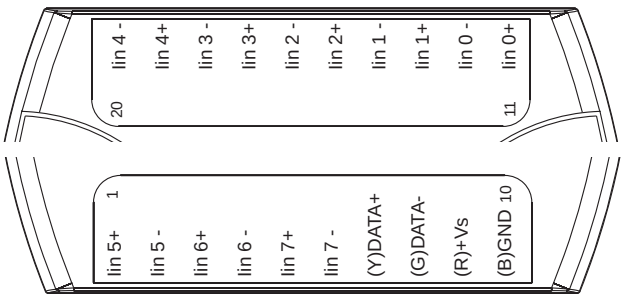
I-7017C/M-7017C/I-7017FC



I-7017RC/M-7017RC

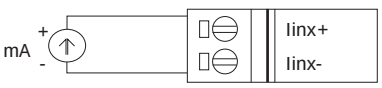


Pin Assignments

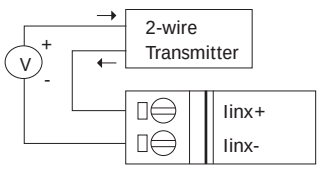


Wire Connections

Current Input



2-wire Transmitter



Ordering Information

I-7017C CR	8-ch Current Input Module using DCON Protocol (Blue Cover) (RoHS)
M-7017C-G CR	8-ch Current Input Module using DCON and Modbus Protocol (Gray Cover) (RoHS)
I-7017FC CR	8-ch Current Input Module (Fast Sampling Version) using DCON Protocol (Blue Cover) (RoHS)
I-7017FC-G CR	8-ch Current Input Module (Fast Sampling Version) using DCON Protocol (Gray Cover) (RoHS)
I-7017RC CR	8-ch Current Input Module with High Voltage Protection using DCON Protocol (Blue Cover) (RoHS)
I-7017RC-G CR	8-ch Current Input Module with High Voltage Protection using DCON Protocol (Gray Cover) (RoHS)
M-7017RC-G CR	8-ch Current Input Module with High Voltage Protection using DCON and Modbus Protocols (Gray Cover) (RoHS)

Accessories

tM-7520U CR 	Tiny Isolated RS-232 to RS-485 Converter (RoHS)
tM-7561 CR 	Tiny USB to Isolated RS-485 Converter with CA-USB18 Cable (RoHS)
tM-SG4 CR 	RS-485 Pull-high/Pull-low and Termination Resistor Module (RoHS)

I-7514U CR 	Isolated 4-channel RS-485 Repeater/Hub/ Splitter (Gray Cover) (RoHS)
SG-770 CR 	7/14 channel Surge Protector (RoHS)
SG-3000 Series 	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers

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