



I-7017

M-7017

8-channel Analog Input Module

Features

- 8-channel Differential Analog Inputs for M-7017
- 8-channel Differential or 6-channel Differential and 2-channel Single Ended for I-7017
- Voltage and Current Input
- +/-35 V_{dc} Overvoltage Protection
- High Resolution: 16-bit
- 3000 V_{dc} Intra-Module Isolation
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C



Introduction

I-7017 is an analog input module provides 8-channel differential or 6-channel differential and 2-channel single ended by jumper selection. Its input type includes both voltage and current and all channels are available for the same type. It requires an optional external 125 ohm resistor for current input. It also features 3000 V_{dc} intra-module isolation as well as +/-35 V_{dc} overvoltage protection. M-7017 supports Modbus RTU and DCON protocols which can be configured via software and provide 8-channel differential analog inputs. Other hardware specifications are the same as I-7017.

Applications

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

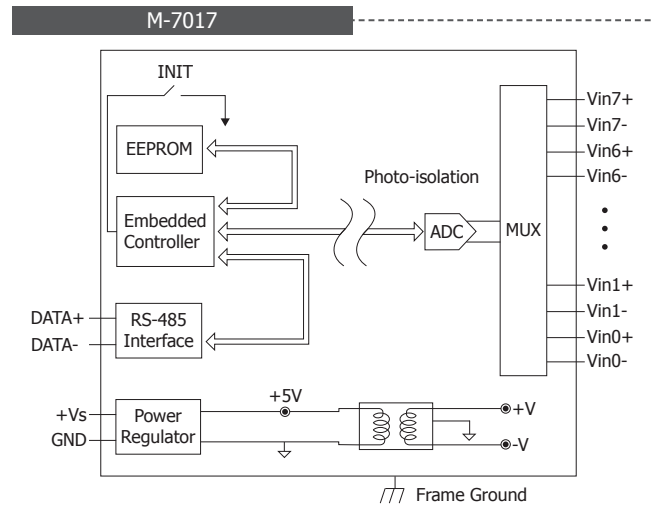
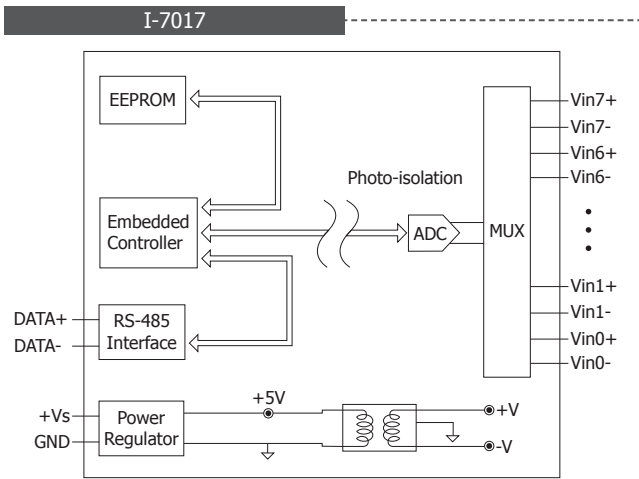
System Specifications

Models	I-7017	M-7017
Communication		
Interface	RS-485	
Format	(N, 8, 1) (N, 8, 2) (E, 8, 1) (O, 8, 1)	
Baud Rate	1200 ~ 115200 bps	
Protocol	DCON	Modbus RTU, DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)	
LED Indicator/Display		
System LED Indicator	Yes, 1 LED as Power/Communication Indicator	
I/O LED Indicator	-	
7-Segment LED Display	-	
Isolation		
Intra-Module Isolation, Field-to-Logic	3000 V _{dc}	
EMS Protection		
ESD (IEC 61000-4-2)	+/-2 kV	
	+/-4 kV	
EFT (IEC 61000-4-4)	+/-4 kV	
Power		
Reverse Polarity Protection	Yes	
Input Range	10 ~ 30 V _{dc}	
Consumption	1.3 W	
Mechanical		
Dimensions (W x L x H)	72 mm x 123 mm x 35 mm	
Installation	DIN-Rail or Wall Mounting	
Environment		
Operating Temperature	-25 ~ +75°C	
Storage Temperature	-40 ~ +85°C	
Humidity	10 ~ 95% RH, Non-condensing	

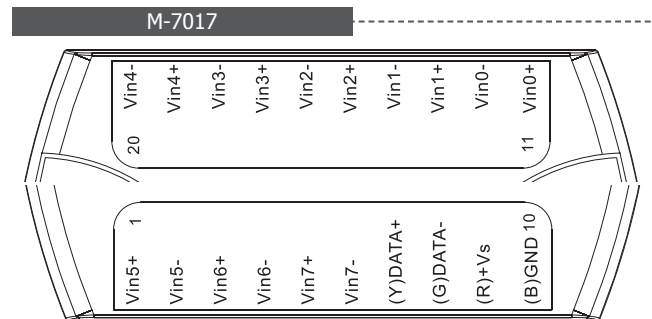
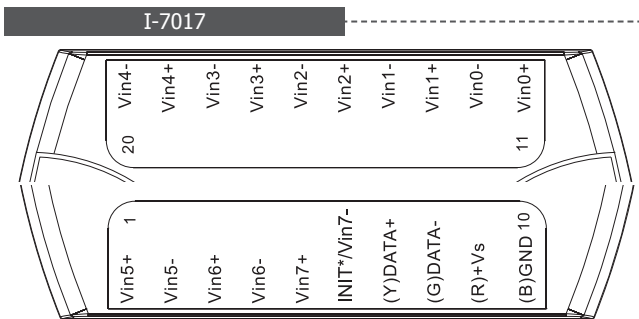
I/O Specifications

Models	I-7017	M-7017
Analog Input		
Channels	8	
Wiring	6-channel Differential and 2-channel Single-ended, or 8-channel Differential.	8-channel Differential.
Input Range	+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA 0 ~ 20 mA, 4 ~ 20 mA (requires optional external 125 Ω resistor)	
Resolution	16-bit	
Accuracy	Normal Mode	0.1%
	Fast Mode	-
Sampling Rate	Normal Mode	10 Hz
	Fast Mode	-
Input Impedance	20 M	
Common Voltage Protection	+/-15 V _{dc}	
Individual Channel Configuration	-	
Overvoltage Protection	+/-35 V _{dc}	

Internal I/O Structure



Pin Assignments



Wire Connections

I-7017

Analog Input Channel 0 to 5 Wire Connection

Analog Input Channel 6 and 7 Wire Connection

8 differential mode JP1: ● ● ● ●

INIT* Mode JP1: ● ● ● ●

M-7017

Analog Input Wire Connection

Ordering Information

I-7017 CR	8-channel Analog Input Module with DCON Protocol (Blue Cover) (RoHS)
I-7017-G CR	8-channel Analog Input Module with DCON Protocol (Gray Cover) (RoHS)
M-7017-G CR	8-channel Analog Input Module with DCON and Modbus Protocol (Gray Cover) (RoHS)

Accessories

	tM-7520U CR	RS-232 to RS-485 converter (RoHS)
	tM-7561 CR	USB to RS-485 converter (RoHS)
	tM-SG4 CR	RS-485 Pull-high/Pull-low and Termination Resistor Module (RoHS)
	I-7514U CR	4-channel RS-485 Hub (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