



I-7017Z

M-7017Z

10-channel Analog Input Module

Features

- 10-ch Differential or 20-ch Single-ended
- Voltage and Current Inputs
- High Resolution: 16-bit
- Overvoltage Protection is up to 240 V_{rms}
- Changeable Sampling Rate
- 4 kV ESD Protection
- 3000 V_{dc} Intra-Module Isolation
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C



Introduction

I-7017Z is an 10-ch differential or 20-ch single-ended voltage inputs module by software selectable with an extremely excellent protection mechanism where Overvoltage protection is up to 240 V_{rms}. Its input type includes both voltage and current. Naturally, I-7017Z is an upgraded version of I-7017; the only difference is that the I-7017Z is much more suitable for critically harsh environment! The sampling rate of I-7017Z is changeable; there are fast mode and normal mode for your consideration. I-7017Z also has qualification for 4 KV ESD protection as well as 3000 V_{dc} intra-module isolation.

Applications

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

System Specifications

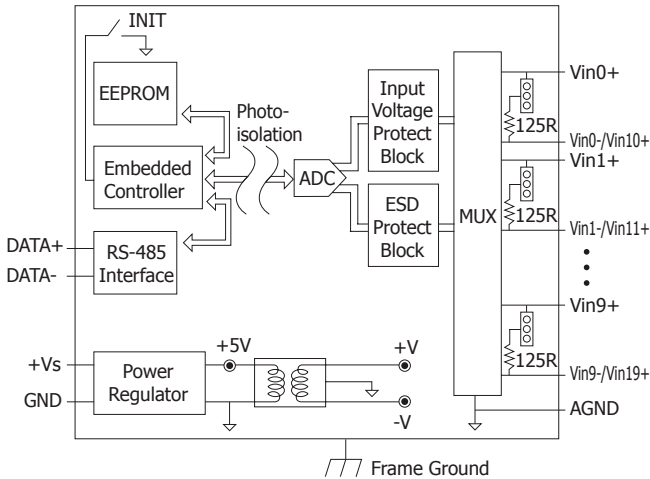
Models	I-7017Z	M-7017Z
Communication		
Interface	RS-485	
Format	N, 8, 1	
Baud Rate	1200 ~ 115200 bps	
Protocol	DCON	Modbus RTU, DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)	
LED Indicator/Display		
System LED Indicator	Yes, 1 LED as Power/Communication Indicator	
I/O LED Indicator	-	
7-Segment LED Display	-	
Isolation		
Intra-Module Isolation, Field-to-Logic	3000 V _{dc}	
EMS Protection		
ESD (IEC 61000-4-2)	+/-4 kV	
EFT (IEC 61000-4-4)	+/-4 kV	
Surge (IEC 61000-4-5)	0.5 kV	
Power		
Reverse Polarity Protection	Yes	
Input Range	10 ~ 30 V _{dc}	
Consumption	2.0 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

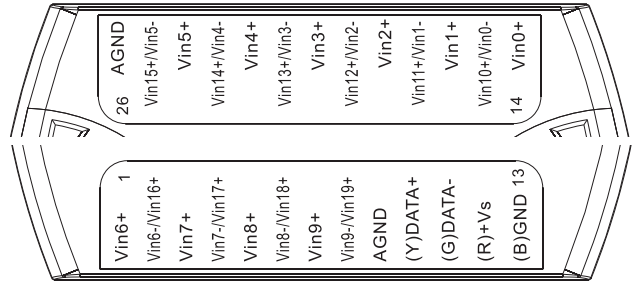
Models	I-7017Z	M-7017Z
Analog Input		
Channels	10/20	
Wiring	Diff./Single-ended	
Input Range	+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA, 0 ~ 20 mA, 4 ~ 20 mA (Jumper Selectable)	
Resolution	12/16-bit	
Accuracy	Normal Mode	0.1%
	Fast Mode	0.5%
Sampling Rate	Normal Mode	10 Hz
	Fast Mode	60 Hz
Input Impedance	Voltage	2 MΩ (Differential) 1 MΩ (Single-ended)
	Current	125 Ω
Common Voltage Protection	+/-200 V _{dc}	
Individual Channel Configuration	Yes	
Overvoltage Protection	240 V _{rms}	

Note1: Differential wiring can be used for voltage input and current input. Single-Ended wiring can be used for voltage input only.

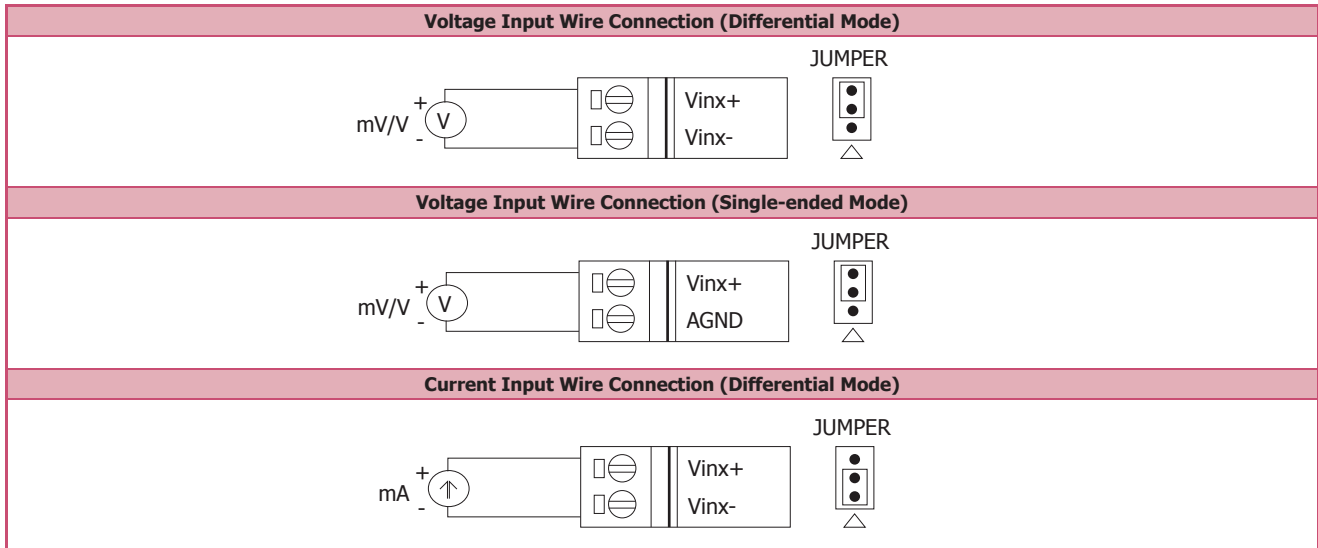
Internal I/O Structure



Pin Assignments



Wire Connections



Ordering Information

I-7017Z-G CR	10-channel Analog Input Module with DCON Protocol (Gray Cover) (RoHS)
M-7017Z-G CR	10-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