

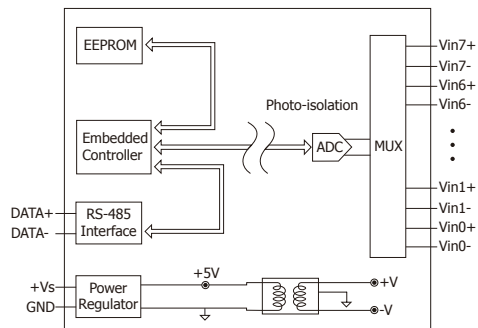
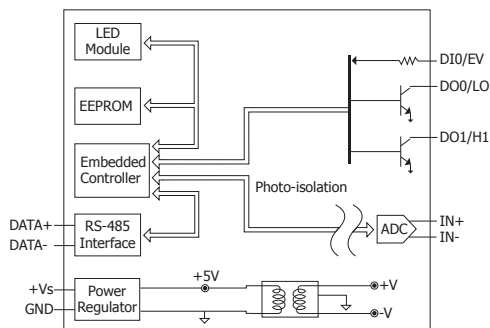


2.2-1. Analog Input

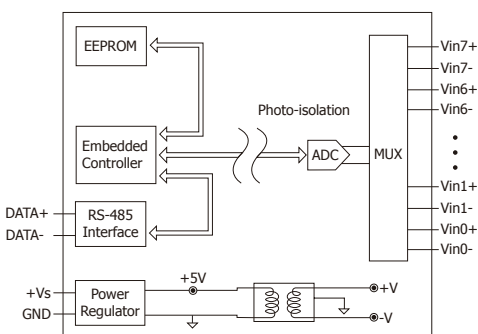
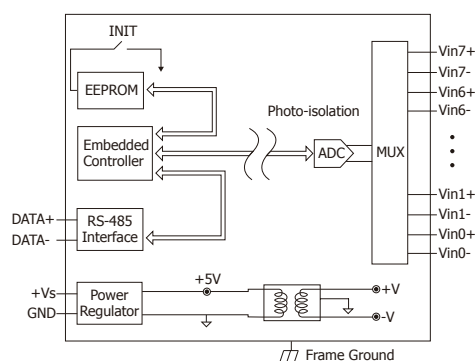
Voltage & Current Input Module (General Grade)							
Model Name		I-7012(D)	I-7012F(D)	I-7017	I-7017F	I-7017C	I-7017FC
				M-7017		M-7017C	
Pictures							
Channel		1		8		8	
Wiring		Differential		Differential (Note 1)		Differential	
Input Range		+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA (requires optional external 125 Ω resistor)		+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA (requires optional external 125 Ω resistor)		+/-20 mA, 0~20 mA, 4~20 mA	
Resolution		16-bit	12/16-bit	16-bit	12/16-bit	16-bit	12/16-bit
Accuracy	Normal mode	0.1%		0.1%		0.1%	
	Fast mode	-	0.5%	-	0.5%	-	0.5%
Sampling Rate	Normal mode	10 Hz		10 Hz		10 Hz	
	Fast mode	-	100 Hz	-	60 Hz	-	60 Hz
Input Impedance		20 M		20 M		20 M	
Common Voltage Protection		+/-10 V _{oc}		+/-15 V _{oc}		+/-15 V _{oc}	
Individual Channel Configuration		-		-		-	
Overvoltage Protection		+/-15 V _{oc}		+/-35 V _{oc}		+/-35 V _{oc}	
System							
Dual Watchdog		Yes					
ESD (IEC 61000-4-2)		+/-2 kV		+/-2 kV for I-7017 +/-4 kV for M-7017	+/-2 kV	+/-2 kV	+/-4 kV
EFT (IEC 61000-4-4)		-		+/-4 kV for M-7017	-	+/-4 kV	
Intra-Module Isolation, Field-to-Logic		3000 V _{oc}					
Power Input		10 ~ 30 V _{oc}					
Power Consumption		1.3 W; 1.9 W for (D) version		1.3 W		1.7 W	1.3 W
Note1: I-7017 and I-7017F are 6-channel differential and 2-channel single-ended, or 8-channel differential. M-7017 is 8-channel differential.							
Note2: I-7012(D) and I-7012F(D) both include 1 DI and 2 DO channels. The specification is as follows							
Digital Input		Digital Output					
Channel	1	Channel	2				
Contact	Dry	Type	Open Collector				
Sink/Source (NPN/PNP)	Source	Sink/Source (NPN/PNP)	Sink				
On Voltage Level	Close to GND	Load Voltage	3.5 ~ 30 V _{oc}				
Off Voltage Level	Open	Max. Load Current	30 mA/Channel				
Counter (50 Hz, 16-bit)	Yes	Power-on Value	Yes				
Input Impedance	3 kΩ	Safe Value	Yes				
Overvoltage Protection	+/-30 V _{oc}						

Voltage & Current Input Module (Industrial Grade)					
Model Name		I-7017R	I-7017R-A5	I-7017RC	I-7017Z
		M-7017R	M-7017R-A5	M-7017RC	M-7017Z
Pictures					
Channel		8		8	10/20 (Note 1)
Wiring		Differential		Differential	Diff./Single-Ended
Input Range		+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V, +/-20 mA (requires optional external 125 Ω resistor)	+/-50 V, +/-150 V	+/-20 mA, 0~20 mA, 4~20 mA	+/-150 mV, +/-500 mV, +/-1 V, +/-5 V, +/-10 V +/-20 mA , 0 ~ 20 mA, 4 ~ 20 mA (Jumper selectable)
Resolution		12/16-bit		12/16-bit	
Accuracy	Normal mode	0.1%		0.1%	
	Fast mode	0.5%		0.5%	
Sampling Rate	Normal mode	10 Hz		10 Hz	
	Fast mode	60 Hz	50 Hz	60 Hz	
Input Impedance		2 M		2 M	
Common Voltage Protection		+/-200 V _{DC}		+/-200 V _{DC}	+/-200 V _{DC}
Individual Channel Configuration					Yes
Overvoltage Protection		240 V _{rms}	+/-200 V _{DC}	240 V _{rms}	240 V _{rms}
System					
Dual Watchdog		Yes			
ESD (IEC 61000-4-2)		+/-4 kV		+/-4 kV	
EFT (IEC 61000-4-4)		+/-4 kV		+/-4 kV	
Intra-Module Isolation, Field-to-Logic		3000 V _{DC}			
Power Input		10 ~ 30 V _{DC}			
Power Consumption		1.3 W		1.3 W	2.0 W
Note1: Differential wiring can be used for voltage input and current input. Single-Ended wiring can be used for voltage input only.					
Note2: For high noisy industrial application, the user should choose I-7017Z, M-7017Z, I-7017R, M-7017R, I-7017R-A5, I-7017RC, M-7017RC.					

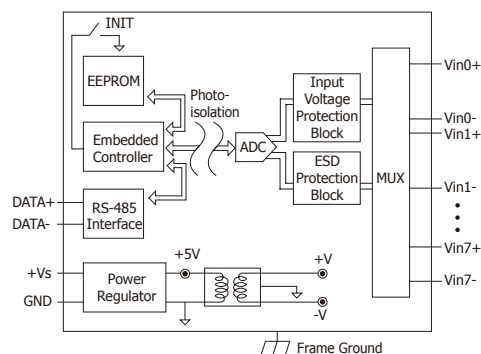
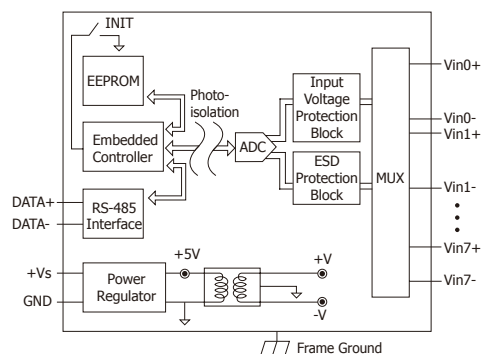
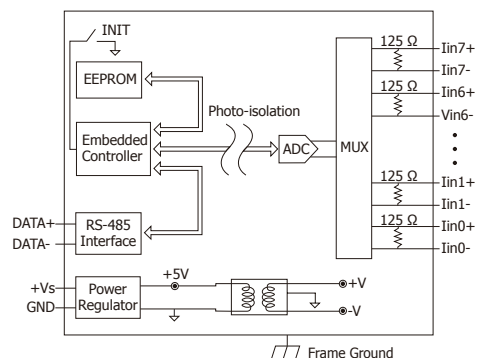
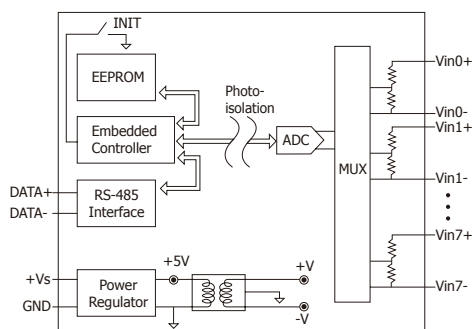
I-7017



I-7017F



M-7017R

**I-7017C/M-7017C**

Internal I/O Structure

