

Features

- I-7042/I-7042D
 - 13-channel Open Collector Output
 - 3750 Vrms Intra-module Isolation
- I-7043/I-7043D/M-7043/M-7043D
 - 16-channel Open Collector Output
 - Non-isolated for all channels
- Sink-type Digital Outputs
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- Dual Watchdog
- Wide Operating Temperature Range: -25 to +75°C



Introduction

System Specifications

Model	I-7042	I-7043	M-7043
	I-7042D	I-7043D	M-7043D
Communication			
Interface	RS-485		
Bias Resistor	No (Usually supplied by the RS-485 Master. Alternatively, add a tM-SG4 or SG-785.)		
Format	(N, 8, 1) (N, 8, 2) (E, 8, 1) (O, 8, 1)		
Baud Rate	1200 to 115200 bps		
Protocol	DCON		Modbus RTU, DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)		
LED Indicators/Display			
System LED Indicator	Yes, 1 as Power/Communication Indicator		
I/O LED Indicators	-	-	-
	Yes, 13 LEDs as Digital Output Indicators	Yes, 16 LEDs as Digital Output Indicators	Yes, 16 LED as Digital Output Indicator
7-segment LED Display	-		
Isolation			
Intra-module Isolation, Field-to-Logic	3750 Vrms	-	
EMS Protection			
ESD (IEC 61000-4-2)	±2 kV Contact for each Terminal	-	
	±4 kV Air for Random Point	-	
EFT (IEC 61000-4-4)	±2 kV for Power Line	-	
Surge (IEC 61000-4-5)	-		
Power			
Reverse Polarity Protection	Yes		
Input Range	+10 ~ +30 Vdc		
Consumption	1.0 W	0.4 W	0.4 W
	1.7 W	1.1 W	1.1 W
Mechanical			
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm		
Installation	DIN-Rail or Wall Mounting		
Environment			
Operating Temperature	-25 to +75°C		
Storage Temperature	-40 to +85°C		
Humidity	10 to 95% RH, Non-condensing		

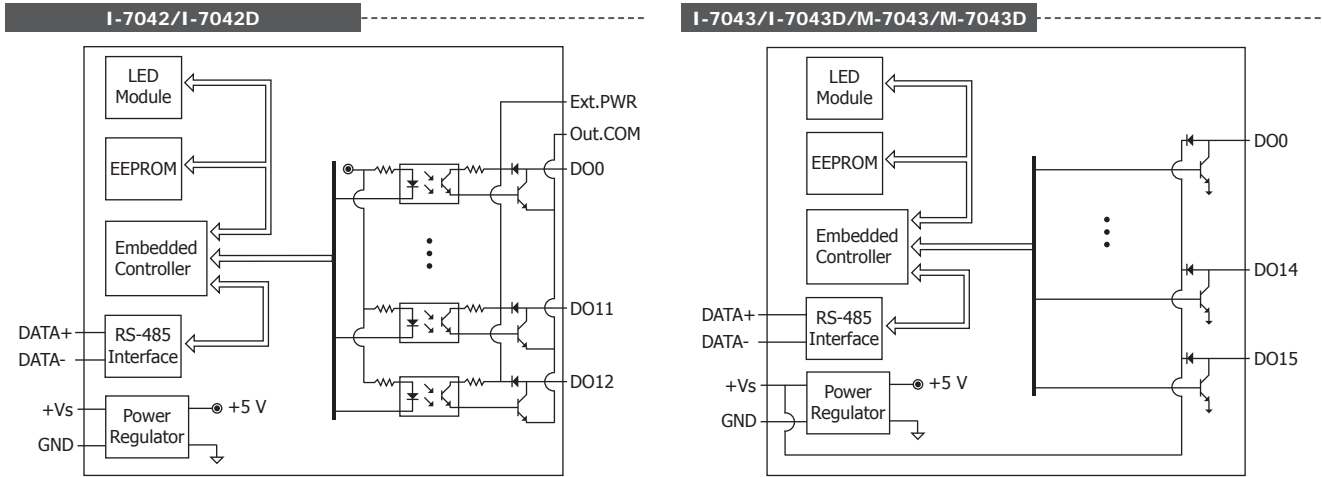
Applications

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

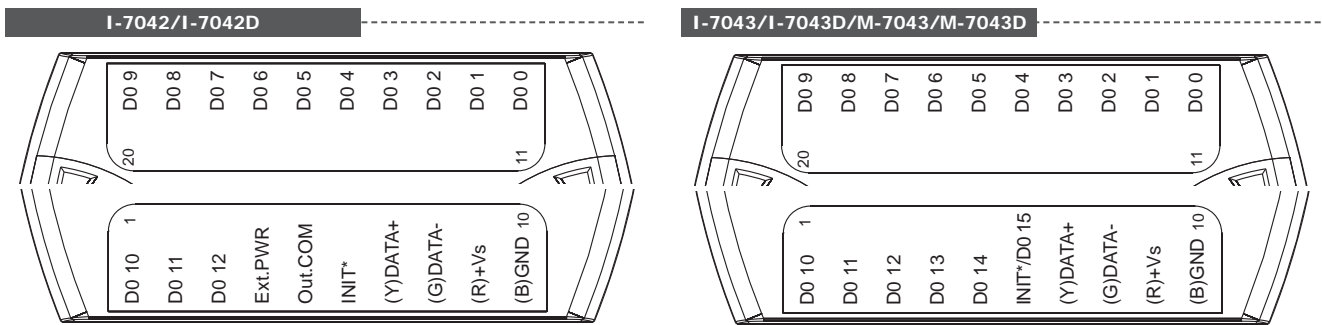
I/O Specifications

Model	I-7042	I-7043	M-7043
	I-7042D	I-7043D	M-7043D
Digital Output			
Channels	13	16	
Type	Open Collector		
Sink/Source (NPN/PNP)	Sink		
Load Voltage	+3.5 ~ 30 Vdc		
Max. Load Current	100 mA/Channel		
Overvoltage Protection	-		
Overload Protection	-		
Power-on Value	Yes		
Safe Value	Yes		

Internal I/O Structure



Pin Assignments



Wire Connections

I-7042/I-7042D			I-7043/I-7043D/M-7043/M-7043D		
Output Type	ON State Readback as 1	OFF State Readback as 0	Output Type	ON State Readback as 1	OFF State Readback as 0
Open Collector Output (Resistance Load)	DOx Ext.PWR Out.COM	DOx Ext.PWR Out.COM	Open Collector Output (Resistance Load)	DOx (R)+Vs (B)GND	DOx (R)+Vs (B)GND
Open Collector Output (Inductive Load)	DOx Ext.PWR Out.COM	DOx Ext.PWR Out.COM	Open Collector Output (Inductive Load)	DOx (R)+Vs (B)GND	DOx (R)+Vs (B)GND

Ordering Information

I-7042 CR	13-channel Isolated Digital Output Module using the DCON Protocol (Blue Cover) (RoHS) Art. No. 113318
I-7042D CR	I-7042 with LED Display (Blue Cover) (RoHS) Art. No. 113319
I-7043 CR	16-channel Non-isolated Digital Output Module using the DCON Protocol (Blue Cover) (RoHS) Art. No. 113320
I-7043D CR	I-7043 with LED Display (Blue Cover) (RoHS) Art. No. 113321
I-7043D-G CR	I-7043 with LED Display (Gray Cover) (RoHS)
M-7043 CR	16-channel Non-isolated Digital Output Module using the DCON and Modbus Protocol (Gray Cover) (RoHS) Art. No. 144914
M-7043D-CR	M-7043-G with LED Display (Gray Cover) (RoHS) Art. No. 144915

Accessories

tM-7520U CR	RS-232 to RS-485 Converter (RoHS)	I-7514U CR	4-channel RS-485 Hub (RoHS)
tM-7561 CR	USB to RS-485 Converter (RoHS)	SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)
tM-SG4 CR	RS-485 Bias and Termination Resistor Module (RoHS)	SG-3000 Series	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers