



Features

- I-7042/I-7042D
 - 13-channel Open Collector Output
 - 3750 Vrms Intra-module Isolation
- I-7043/I-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 ~ +75°C



Introduction

The I-7042 offers 13 channels digital output channels, each of which features Photocouple isolation and supports sink-type output using an open collector. There are also options to enable both power-on and safe values. The I-7042D has 13 LED indicators that can be used to monitor the status of DO channels. 3750 Vrms intra-module isolation is standard.

The I-7043 offers 16 digital output channels, each of which are non-isolated and support sink-type output using an open collector. There are also options to enable both power-on and safe values. The I-7043D has 16 LED indicators that can be used to monitor the status of DO channels.

System Specifications

Model	I-7042	I-7042D	I-7043	I-7043D
Communication				
Interface	RS-485			
Format	(N, 8, 1) (N, 8, 2) (E, 8, 1) (O, 8, 1)			
Baud Rate	1200 ~ 115200 bps			
Protocol	DCON			
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)			
LED Indicators/Display				
System LED Indicator	Yes, 1 LED as Power/Communication Indicator			
I/O LED Indicators	-	Yes, 13 LEDs as Digital Output Indicators	-	Yes, 16 LEDs as Digital Output Indicators
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	1.7 W	0.4 W	1.1W
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			

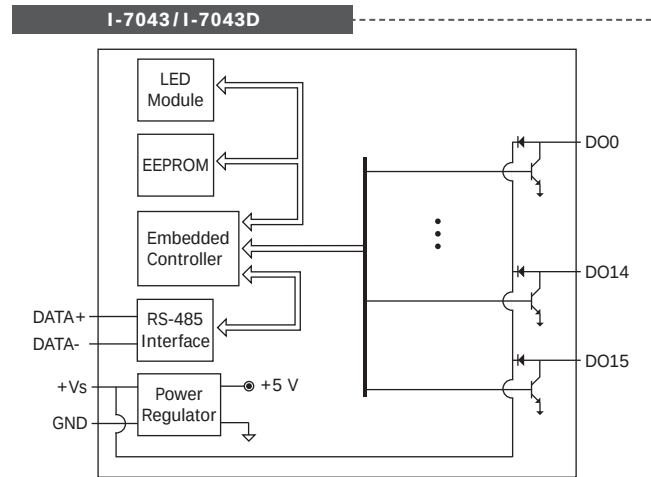
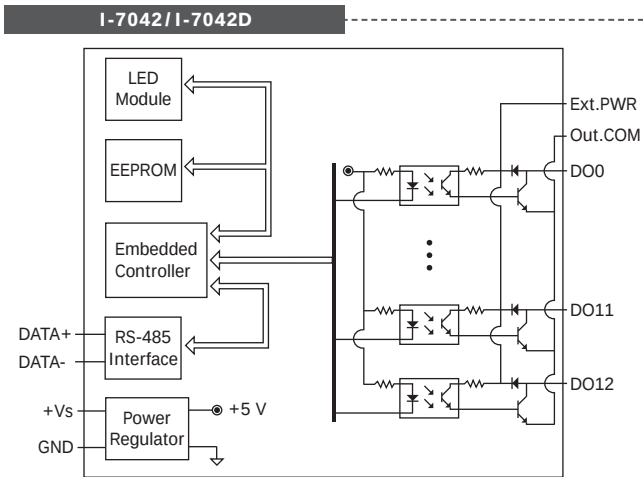
Applications

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

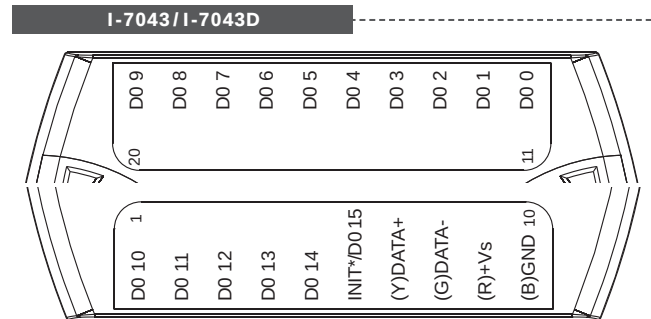
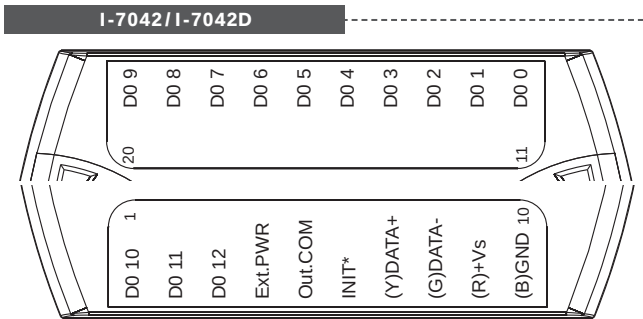
I/O Specifications

Model	I-7042	I-7042D	I-7043	I-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		
Output Type	ON State Readback as 1	OFF State Readback as 0
Open Collector Output (Resistance Load)		
Open Collector Output (Inductive Load)		

I-7043/I-7043D		
Output Type	ON State Readback as 1	OFF State Readback as 0
Open Collector Output (Resistance Load)		
Open Collector Output (Inductive Load)		

Ordering Information

I-7042 CR	13-channel Isolated Digital Output Module using the DCON Protocol (Blue Cover) (RoHS)
I-7042D CR	I-7042 with LED Display (Blue Cover) (RoHS)
I-7043 CR	16-channel Non-isolated Digital Output Module using the DCON Protocol (Blue Cover) (RoHS)
I-7043D CR	I-7043 with LED Display (Blue Cover) (RoHS)
I-7043D-G CR	I-7043 with LED Display (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 Bias 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 Input transformers