

## Features

- I-7063(D)
  - 8 Digital Input channels and 3 Relay Output channels
- I-7065(D) and M-7065(D)
  - 4 Digital Input channels and 5 Relay Output channels
- Form A Power Relay Output
- Sink- and Source-type for Digital Input
- Digital Input Channels can be used as 16-bit Counters
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C



## Introduction

The I-7063 module provides 8 digital input channels and 3 Form A relay output channels, and the 7065 series provides 4 digital input channels and 5 Form A relay output channels. All digital input channels can be used as 16-bit counters. In addition, the digital input channels can be selected either as sink- or source-type via wire connections. The I-7063D provides 11 LED indicators and the I-7065D/M-7065D provides 9 LED indicators that can be used to monitor the status of the digital input and relay output. The M-7065 supports both the Modbus RTU and DCON protocols, which can be configured via software. There are also options for configuring power-on and safe values. 4 kV ESD protection and 3750 VDC intra-module isolation are also provided to enhance noise protection capabilities in industrial environments.

## System Specifications

Model	I-7063	I-7065	M-7065
	I-7063D	I-7065D	M7065D
<b>Communication</b>			
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)		
<b>LED Indicators/Display</b>			
System LED Indicator	Yes, 1 LED as Power/Communication Indicator		
I/O LED Indicators	-	-	-
	Yes, 11 LEDs as Digital Input/Relay Output Indicators	Yes, 9 LEDs as Digital Input/Relay Output Indicators	Yes, 9 LEDs as Digital Input/Relay Output Indicators
7-Segment LED Display	-		
<b>Isolation</b>			
Intra-module Isolation, Field-to-Logic	3750 Vdc		
<b>EMS Protection</b>			
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal ±8 kV Air for Random Point		
EFT (IEC 61000-4-4)	±2 kV for Power Line		
Surge (IEC 61000-4-5)	-		
<b>Power</b>			
Reverse Polarity Protection	Yes		
Input Range	10 ~ 30 Vdc		
Consumption	0.9 W	1.3 W	1.3 W
	1.4 W	1.8 W	1.8 W
<b>Mechanical</b>			
Dimensions (W x L x H)	72 mm x 123 mm x 35 mm		
Installation	DIN-Rail or Wall Mounting		
<b>Environment</b>			
Operating Temperature	-25 ~ +75°C		
Storage Temperature	-40 ~ +85°C		
Humidity	10 ~ 95% RH, Non-condensing		

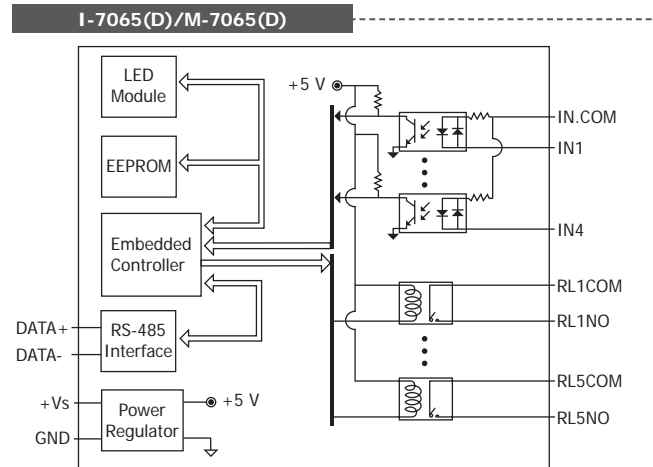
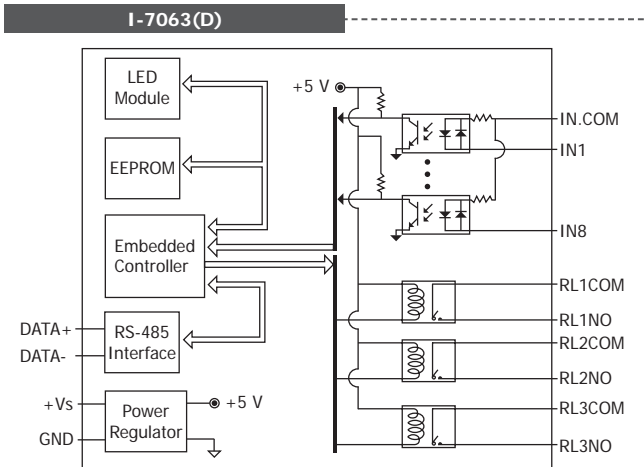
## Applications

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

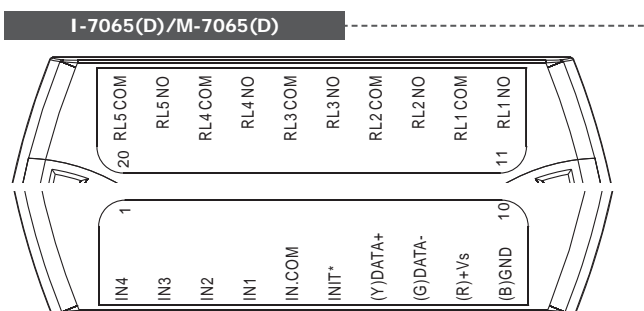
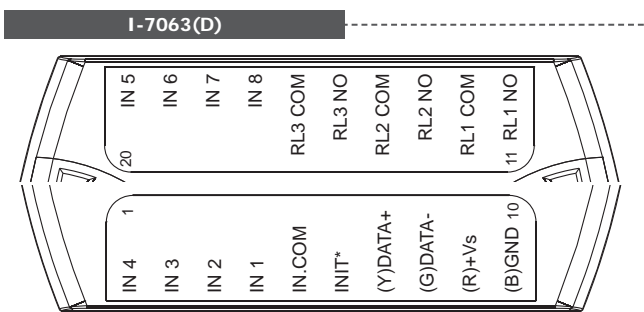
## I/O Specifications

Model	I-7063	I-7065	M-7065
	I-7063D	I-7065D	M7065D
<b>Relay Output</b>			
Channels	3	5	
Relay Type	Power Relay		
Form A Relay	Contact Rating	5 A @ 250 VAC 5 A @ 30 Vdc	
	Min. Contact Load	10 mA @ 5 V	
	Contact Material	Gold-plated Silver Cadmium Alloy	
	Operate Time	6 ms	
	Release Time	3 ms	
	Mechanical Endurance	2 × 10 <sup>7</sup> ops.	
Electrical Endurance	1 × 10 <sup>5</sup> ops.		
Surge Strength	4000 Vdc		
Power-on Value	Yes		
Safe Value	Yes		
<b>Digital Input/Counter</b>			
Channels	8	4	
Type	Dry Contact	-	
	Wet Contact	Sink/Source	
Wet Contact	On Voltage Level	+1 Vdc Max.	
	Off Voltage Level	+4 ~ 30 Vdc	
Dry Contact	On Voltage Level	-	
	Off Voltage Level	-	
	Effective Distance for Dry Contact	-	
Counters	Max. Count	65535 (16-bit)	
	Max. Input Frequency	100 Hz	
	Min. Pulse Width	5 ms	
Input Impedance	3 kΩ		
Channel-to-Channel Isolation	-		
Overvoltage Protection	±35 Vdc		

### Internal I/O Structure



### Pin Assignments



### Wire Connections

Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
	OPEN or <1 Vdc	+4 ~ +30 VDC
Sink		
	OPEN or <1 Vdc	+4 ~ +30 VDC
Source		
Output Type	ON State Readback as 1	OFF State Readback as 0
Relay Output		

### Ordering Information

I-7063 CR	8-channel Isolated Digital Input and 3-channel Relay Output Module using the DCON Protocol (Blue Cover) (RoHS)
I-7063D CR	I-7063 with LED Display (Blue Cover) (ROSH)
I-7065 CR	4-channel Isolated Digital Input and 5-channel Relay Output Module using the DCON Protocol (Blue Cover) (RoHS)
I-7065-G CR	4-channel Isolated Digital Input and 5-channel Relay Output Module using the DCON Protocol (Gray Cover) (RoHS)
I-7065D CR	I-7065 with LED Display (Blue Cover) (ROSH)
I-7065D-G CR	I-7065-G with LED Display (Gray Cover) (ROSH)
M-7065-G CR	4-channel Isolated Digital Input and 5-channel Relay Output Module using the DCON and Modbus Protocols (Gray Cover) (RoHS)
M-7065D-G CR	M-7065-G with LED Display (Gray Cover) (ROSH)

### 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

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RS-485 Remote I/O Modules

I-7063/I-7063D/I-7065/I-7065D/M-7065/M-7065D