



**I-7063**

8-channel Isolated Digital Input and 3-channel Relay Output Module



**I-7063D**

8-channel Isolated Digital Input and 3-channel Relay Output Module



**I-7065(D)**

4-channel Isolated Digital Input and 5-channel Relay Output Module



**M-7065(D)**

4-channel Isolated Digital Input and 5-channel Relay Output Module

## 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 to +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		
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)		
<b>LED Indicators/Display</b>			
System LED Indicator	Yes, 1 as Power/Communication Indicator		
I/O LED Indicators	-	-	-
	Yes, 11 as Digital Input/Relay Output Indicators	Yes, 9 as Digital Input/Relay Output Indicators	Yes, 9 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 (L x W x H)	123 mm x 72 mm x 35 mm		
Installation	DIN-Rail or Wall Mounting		
<b>Environment</b>			
Operating Temperature	-25 to +75°C		
Storage Temperature	-40 to +85°C		
Humidity	10 to 95% RH, Non-condensing		

## Applications

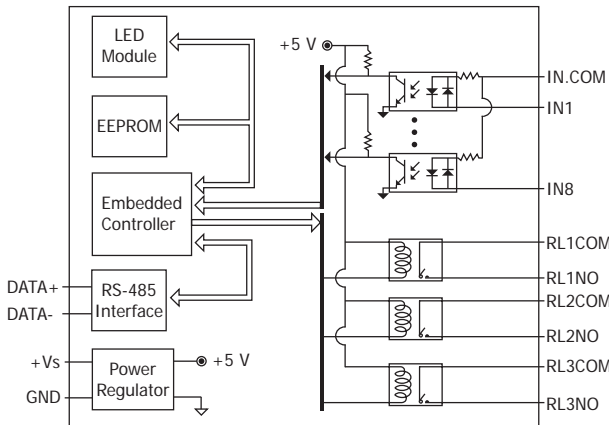
- Building Automation
- Machine Automation
- Remote Diagnosis
- Factory Automation
- Remote Maintenance
- Testing Equipment

## I/O Specifications

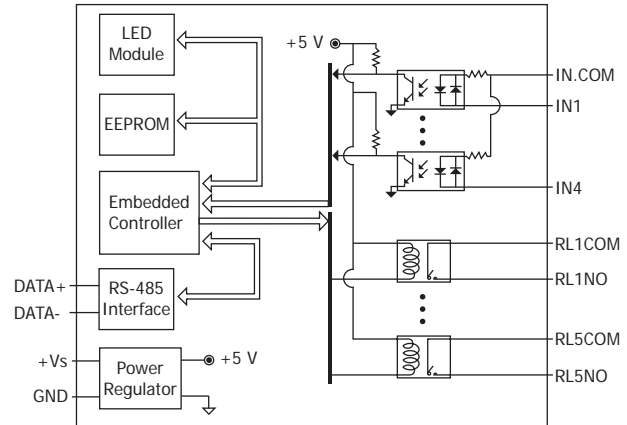
Model	I-7063	I-7065	M-7065
	I-7063D	I-7065D	M7065D
<b>Relay Output</b>			
Channels	3	5	
Relay Type	Power Relay		
Form A Relay	Contact Rating	5 A @ 250 VAC 5 A @ 30 VDC	
	Min. Contact Load	10 mA @ 5 V	
	Contact Material	Gold-plated Silver Cadmium Alloy	
	Operate Time	6 ms	
	Release Time	3 ms	
	Mechanical 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

I-7063(D)

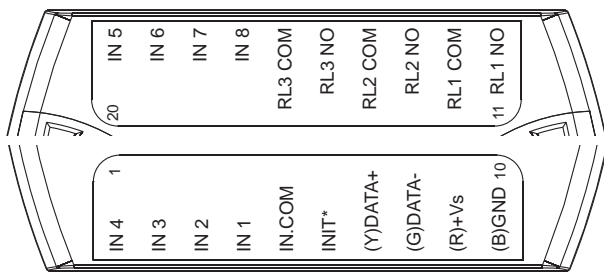


I-7065(D)/M-7065(D)

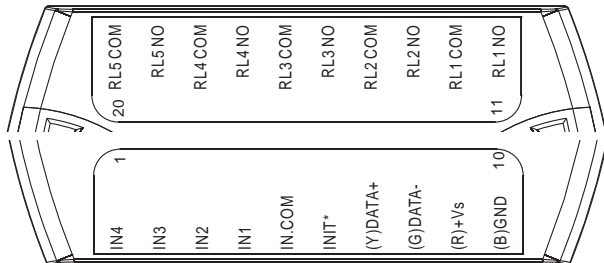


## Pin Assignments

I-7063(D)



I-7065(D)/M-7065(D)



## Wire Connections

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

## Ordering Information

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