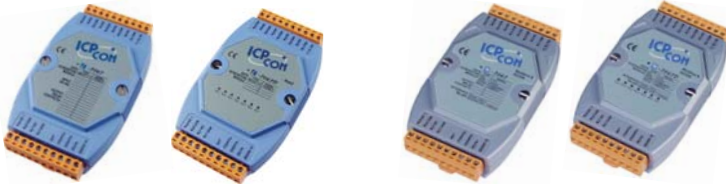




**I-7061(D) M-7061(D)**  
12-channel Power Relay Output Module



**I-7067(D) M-7067(D)**  
7-channel Signal Relay Output Module

## Features

- I-7061(D) and M-7061(D)
  - 12-channel Power Relay Output
  - 4 kV EFT Protection
  - 3 kV Surge Protection
- I-7067(D) and M-7067(D)
  - 7-channel Signal Relay Output
  - 2 kV EFT Protection
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- Dual Watchdog
- Wide Operating Temperature Range: -25 to +75°C



## Introduction

The 7061 series provides 12 power relay output channels and the 7067 series provides 7 signal relay output channels. There are options for configuring power-on and safe values. 4 kV ESD protection and 3750 Vdc intra-module isolation are also provided to enhance the noise protection capabilities in industrial environment. The "D" versions of the 7061 series provide 12 LED indicators and the "D" versions of the 7067 series provide 7 LED indicators that can be used to monitor the status of the relay output channels. The "M" versions of each series support both the Modbus RTU and DCON protocols, which can be configured via software. The 7061 series are the ideal solution for high power applications and the 7067 series are the ideal solution for small signal switching.

## System Specifications

Model	I-7061	I-7067	M-7061	M-7067
	I-7061D	I-7067D	M-7061D	M-7067D
<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, 12 LEDs as Digital Input/Relay Output Indicators	Yes, 7 LEDs as Digital Input/Relay Output Indicators	Yes, 12 LEDs as Digital Input/Relay Output Indicators	Yes, 7 LEDs as Digital Input/Relay Output Indicators
7-segment LED Display	-			
<b>Isolation</b>				
Intra-module Isolation, Field-to-Logic	3750 Vdc	1500 Vdc	3750 Vdc	1500 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)	±4 kV for Power Line	±2 kV for Power Line	±4 kV for Power Line	±2 kV for Power Line
Surge (IEC 61000-4-5)	±3 kV for Power Line	-	±3 kV for Power Line	-
<b>Power</b>				
Reverse Polarity Protection	Yes			
Input Range	+10 ~ +30 VDC			
Consumption	1.7 W	1.5 W	1.7 W	1.5 W
	2.3 W	1.9 W	2.3 W	1.9 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

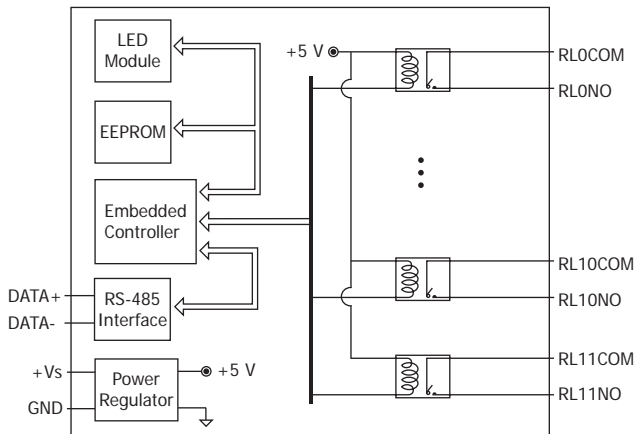
- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

## I/O Specifications

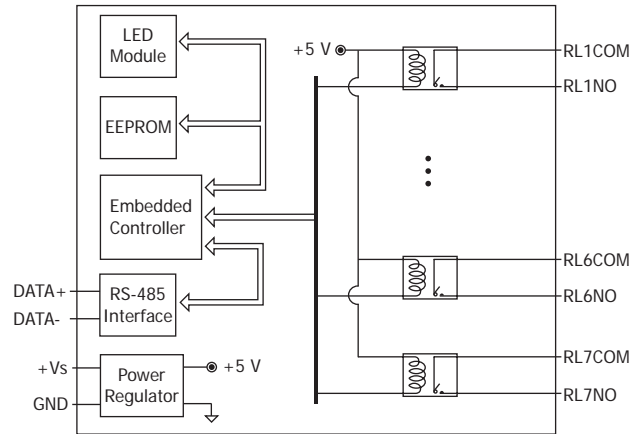
Model	I-7061	I-7067	M-7061	M-7067	
	I-7061D	I-7067D	M-7061D	M-7067D	
<b>Relay Output</b>					
Channels	12 (Form A)	7 (Form A)	12 (Form A)	7 (Form A)	
Relay Type	Power Relay	Signal Relay	Power Relay	Signal Relay	
Form A Relay	Contact Rating	5 A @ 250 VAC 5 A @ 30 Vdc	0.5 A @ 120 VAC 1 A @ 24 Vdc	5 A @ 250 VAC 5 A @ 30 Vdc	0.5 A @ 120 VAC 1 A @ 24 Vdc
	Min. Contact Load	10 mA @ 5 V	1 mA @ 1 V	10 mA @ 5 V	1 mA @ 1 V
	Contact Material	Silver TinAlloy	Gold overlay silver palladium	Silver TinAlloy	Gold overlay silver palladium
	Operate Time	10 ms	5 ms	10 ms	5 ms
	Release Time	5 ms	2 ms	5 ms	2 ms
	Mechanical Endurance	2 × 10 <sup>7</sup> ops.	5 × 10 <sup>6</sup> ops.	2 × 10 <sup>7</sup> ops.	5 × 10 <sup>6</sup> ops.
	Electrical Endurance	10 <sup>5</sup> ops.			
Surge Strength	3000 Vdc	1500 Vdc	3000 Vdc	1500 Vdc	
Power-on Value	Yes				
Safe Value	Yes				

## Internal I/O Structure

I-7061(D)/M-7061(D)

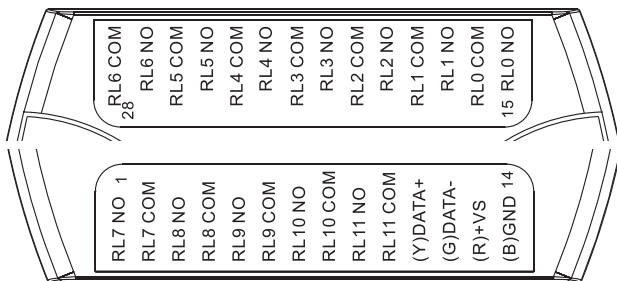


I-7067(D)/M-7067(D)

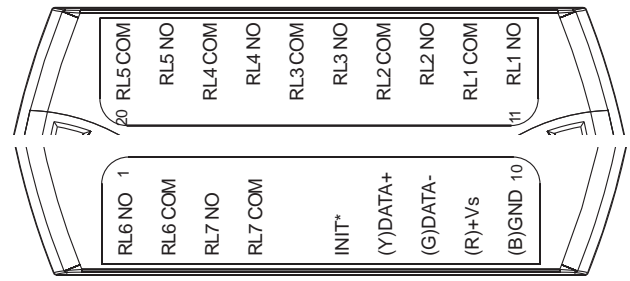


## Pin Assignments

I-7061(D)/M-7061(D)



I-7067(D)/M-7067(D)



## Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Relay Output		

## Ordering Information

<b>I-7061-G CR</b>	12-channel Power Relay Output Module using the DCON Protocol (Gray Cover) (RoHS)
<b>I-7061D-G CR</b>	I-7061 with LED Display (Gray Cover) (RoHS)
<b>M-7061-G CR</b>	12-channel Power Relay Output Module using the DCON and Modbus Protocols (Gray Cover) (RoHS)
<b>M-7061D-G CR</b>	M-7061 with LED Display (Gray Cover) (RoHS)
<b>I-7067 CR</b>	7-channel Signal Relay Output Module using the DCON Protocol (Blue Cover) (RoHS)
<b>I-7067D CR</b>	I-7067 with LED Display (Blue Cover) (RoHS)
<b>I-7067D-G CR</b>	I-7067 with LED Display (Gray Cover) (RoHS)
<b>M-7067-G CR</b>	7-channel Signal Relay Output Module using the DCON and Modbus Protocols (Gray Cover) (RoHS)
<b>M-7067D-G CR</b>	M-7067 with LED Display (Gray Cover) (RoHS)

## Accessories

<b>tM-7520U CR</b>	Tiny Isolated RS-232 to RS-485 Converter (RoHS)
<b>tM-7561 CR</b>	Tiny USB to Isolated RS-485 Converter with CA-USB18 Cable (RoHS)
<b>tM-SG4 CR</b>	RS-485 Pull-high/Pull-low and Termination Resistor Module (RoHS)

<b>I-7514U CR</b>	Isolated 4-channel RS-485 Repeater/Hub/Splitter (Gray Cover) (RoHS)
<b>SG-770 CR</b>	7/14 channel Surge Protector (RoHS)
<b>SG-3000 Series</b>	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers