



**I-7063A**

8-channel Isolated Digital Input and 3-channel AC SSR Output Module



**I-7063AD**



**I-7065A**

4-channel Isolated Digital Input and 5-channel AC SSR Output Module



**I-7065AD**

## Features

- I-7063A(D)
  - 8 Digital Input channels and 3 AC SSR Output channels
- I-7065A(D)
  - 4 Digital Input channels and 5 AC SSR Output channels
- Form A AC Solid State Relay Output
- No Arcing, No Bounce, and No Switching Noise
- 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-7063A module provides 8 digital input channels and 3 AC SSR(Solid State Relay) output channels, and the I-7065A provides 4 digital input channels and 5 AC SSR 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. In comparison to electromechanical relays, SSR technology provides a faster response time and greater electrical endurance. The integration of AC SSR technology also eliminates potential for arcing, bounce, and switching noise. The I-7063AD provides 11 LED indicators and the I-7065AD provides 9 LED indicators that can be used to monitor the status of the digital input and SSR output. 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-7063A	I-7063AD	I-7065A	I-7065AD
<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			
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
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	0.5 W	1.0 W	0.6 W	1.0 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			

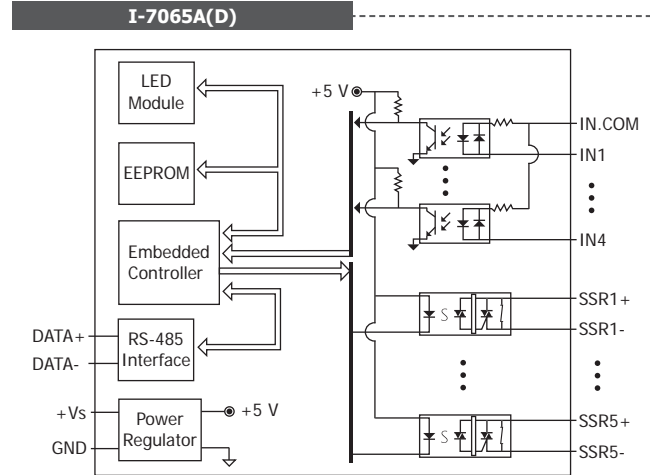
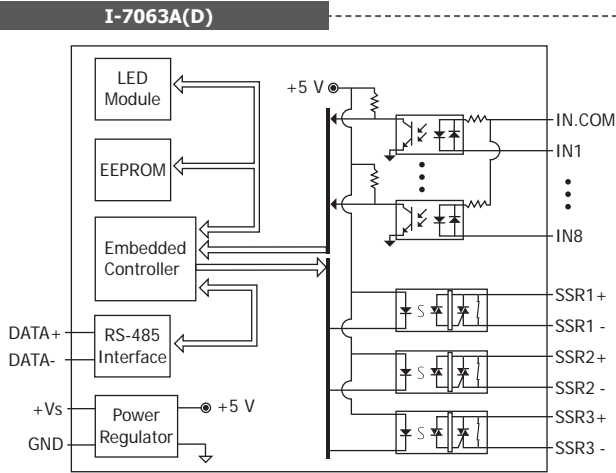
## Applications

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

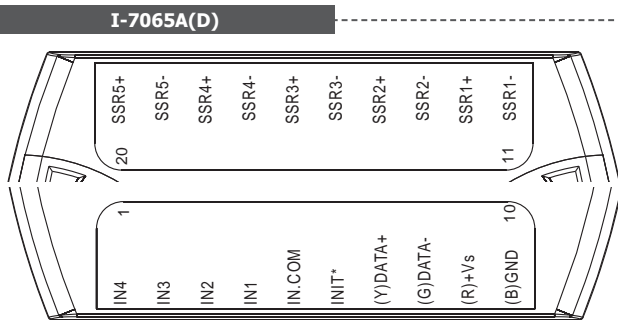
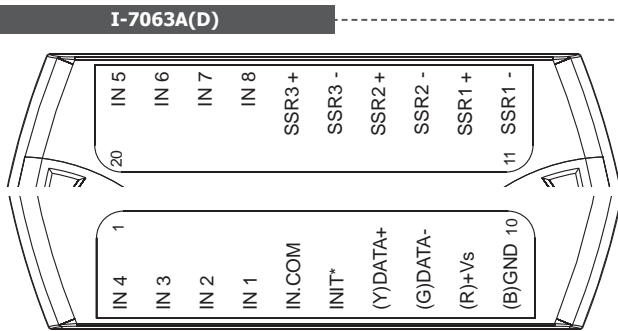
## I/O Specifications

Model	I-7063A	I-7063AD	I-7065A	I-7065AD
<b>AC Solid State Relay Output</b>				
Channels	3		5	
Relay Type	AC-SSR (Form A)			
Form A AC-SSR	Operating Voltage Range	24 ~ 265 VAC		
	Max. Load Current	1 A		
	Leakage Current	1.5 mA		
	Min. Operate Time	1/2 cycle + 1 ms		
	Min. Release Time	1/2 cycle + 1 ms		
	Dielectric Strength	2500 VAC		
Electrical Endurance	Long Life, No Arcing, No Bounce, No Switching Noise			
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
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
AC-SSR Output		

## Ordering Information

<b>I-7063A CR</b>	8-channel Isolated Digital Input and 3-channel AC SSR Output Module using the DCON Protocol (Blue Cover) (RoHS)
<b>I-7063AD CR</b>	I-7063A with LED Display (Blue Cover) (ROSH)
<b>I-7065A CR</b>	4-channel Isolated Digital Input and 5-channel AC SSR Output Module using the DCON Protocol (Blue Cover) (RoHS)
<b>I-7065AD CR</b>	I-7065A with LED Display (Blue 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