



Introduction

The I-7063B module provides 8 digital input channels and 3 DC SSR output channels, and the I-7065B provides 4 digital input channels and 5 DC 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 DC SSR technology also eliminates potential for arcing, bounce, and switching noise. The I-7063BD provides 11 LED indicators and the I-7065BD/M-7065BD 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. The M-7065B supports both the Modbus RTU and DCON protocols, which can be configured via software.

System Specifications

Model	I-7063B	I-7065B	M-7065B	
Model	I-7063BD	I-7065BD	M-7065BD	
Communication				
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 Se	conds), Communicatio	on (Programmable)	
LED Indicators/Displ	ау			
System LED Indicator	Yes, 1 as Power/Cor	mmunication Indicato	r	
	-	-	-	
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	-	-		
Isolation				
Intra-module Isolation, Field-to-Logic	3750 VDC			
EMS Protection				
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal			
ESD (IEC 01000-4-2)	±8 kV Air for Random Point			
EFT (IEC 61000-4-4)	±2 kV for Power Lin	e		
Surge (IEC 61000-4-5)	-			
Power				
Reverse Polarity Protection	Yes			
Input Range	+10 ~ +30 VDC			
Consumption	0.5 W	0.6 W	0.6 W	
Consumption	1.0 W	1.0 W	1.0 W	
Mechanical				
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm			
Installation	DIN-Rail or Wall Mounting			
Environment				
Operating Temperature	-25 to +75°C			
Storage Temperature	-40 to +85°C			
Humidity	10 to 95% RH, Non-condensing			

Applications

- Building Automation
- Factory Automation
- Remote Diagnosis

• Remote Maintenance

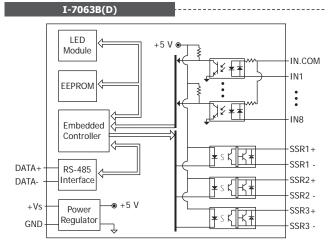
• Testing Equipment

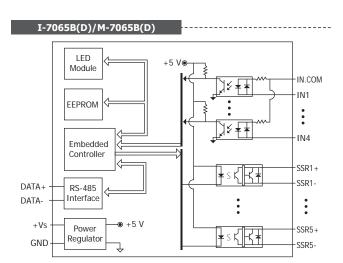
I/O Specifications

Model		I-7063B	I-7065B	M-7065B	
		I-7063BD	I-7065BD	M-7065BD	
DC Solid State Relay Output					
Channels	Channels		5		
Relay Type		DC-SSR (Form	DC-SSR (Form A)		
	Operating Voltage Range				
	Max. Load Current	1 A			
	Leakage Current	0.1 mA			
Form A	Finite Operate Time				
DC-SSR	Min. Release Time	1 ms			
	Dielectric Strength	3500 VDC			
	Electrical Endurance		Long Life, No Arcing, No Bounce, No Switching Noise		
Power-on \	/alue	Yes			
Safe Value	Safe Value				
Digital In	Digital Input/Counter				
Channels		8	4		
Туре	Dry Contact	-			
Type	Wet Contact	Sink/Source			
Wet Contac	ON Voltage Level	+1 VDC Max.			
Wet Contac	OFF Voltage Level	+4 ~ 30 VDC	+4 ~ 30 VDC		
	ON Voltage Level	-			
Dry Contac	t OFF Voltage Level	-			
Effective Distance for Dry Contact		-			
Max. Count		65535 (16-bit)			
Counters	Max. Input Frequency	100 Hz			
Min. Pulse Width		5 ms			
Input Impedance		3 kΩ			
Channel-to-Channel Isolation		-			
Overvoltage Protection		±35 VDC			

Machine Automation

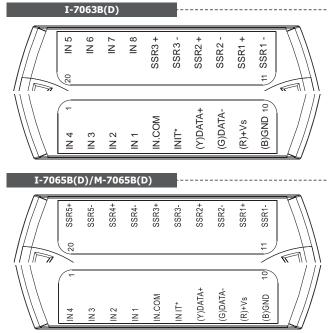
Internal I/O Structure





Wire Connections

🖿 Pin Assignments



Digital Input/ Counter	ON State Readback as 1	OFF State Readback as 0	
	OPEN or <1 VDC	+4 ~ +30 VDC	
Sink	× INx 3K +- IN.COM IN.COM	→ INx 3K +- IN.COM : Coher channels	
Source	OPEN or <1 VDC	+4 ~ +30 VDC	
	× INx 3K + To other IN.COM channels	- + To other IN.COM	
Output Turns	ON State OFF State		
Output Type	Readback as 1	Readback as 0	
Relay Output	□ □ □ □ □ □ □ □ SSRx+ SSRx- SSRx-	Load □⊖ SSRx+ □C × □⊖ SSRx -	

Ordering Information

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