



I-87063W

4-channel Isolated Digital Input and
4-channel Relay Output Module with 16-bit Counters

Introduction

I-87063W offers 4-channel digital inputs with isolation and 4-channel Form C power relay outputs. All DI channels are also able to be used as 16-bit counters. I-87063W has 8 LED indicators for DI channel and relay output status. All DI and DO channels have 4 kV ESD protection.

Features

- Support Digital Inputs (Sink/Source)
- Photocouple Isolation
- Can Be Used As Counters
- Support Digital Outputs (Form C Power Relay)
- 4 kV ESD Protection
- 3750 V_{DC} Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 ~ +75°C



Applications

Building Automation, Factory Automation, Machine Automation, Remote Maintenance, Remote Diagnosis, Testing Equipment.

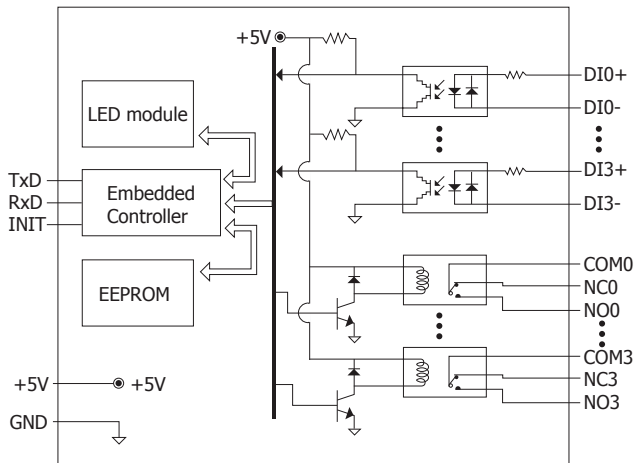
System Specifications

Communication	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
Safe Value (When Host Fail or Communication Fail)	Yes
Power-on Preset Value	Yes
LED Indicator/Display	
System LED Indicator	1 LED as Power/Communication Indicator
I/O LED Indicator	8 LEDs as Digital Input and Relay output Indicators
Isolation	
Intra-Module Isolation, Field-to-Logic	3750 V _{rms}
EMS Protection	
ESD (IEC 61000-4-2)	4 kV Contact for Each Terminal
	8 kV Air for Random Point
Power	
Power Consumption	1.5 W Max.
Mechanical	
Dimensions (W x L x H)	30 mm x 102 mm x 115 mm
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 95% RH, Non-condensing

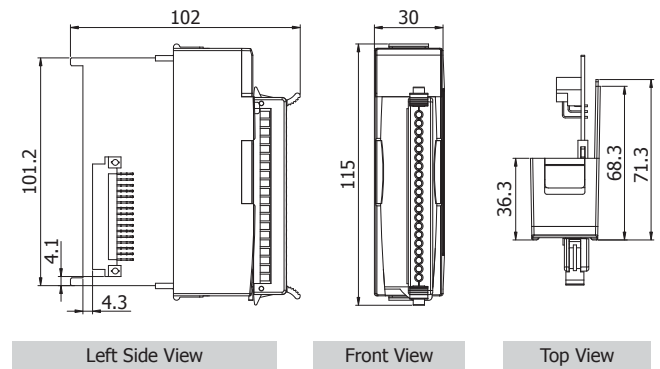
I/O Specifications

Digital Input		
Channels	4	
Type	Wet Contact	
Sink /Source (NPN /PNP)	Sink, Source	
On Voltage Level	+3.5 V _{DC} ~ 30 V _{DC}	
Off Voltage Level	+1 V _{DC} Max.	
Input Impedance	3 KΩ, 0.25 W	
Counters	Channels	4
	Max. Counts	16-bit (65535)
	Max. Input Frequency	100Hz
	Min. Pulse Width	5 ms
Channel to Channel Isolation	Yes	
Low Pass Filter	Yes	
Effective Distance for Dry Contact	-	
Digital Output		
Channels	4	
Type	Power Relay	
Sink /Source (NPN /PNP)	Form C	
Relay Contact Voltage Range	5 A (NO)/3A (NC) @ 30 V _{DC}	
	5 A (NO)/3A (NC) @ 277 V _{AC}	
Max. Load Current	5 A (NO)/3A (NC)	
Max. Operate Time	10 ms Max.	
Max. Release Time	5 ms Max.	
Insulation Resistance	Min. 1000 MΩ, at 500 V _{DC}	
Dielectric Strength	Between Open Contacts	750 V _{AC} , 50/60 Hz (at 1 Minute)
	Between Coil and Contacts	4000 V _{AC} , 50/60 Hz (at 1 Minute)
Relay Life	Mechanical	5 million ops (No Load).
	Electrical	100, 000 Min. (Rated Load)
Power-on Value	Yes	
Safe Value	Yes	

Internal I/O Structure



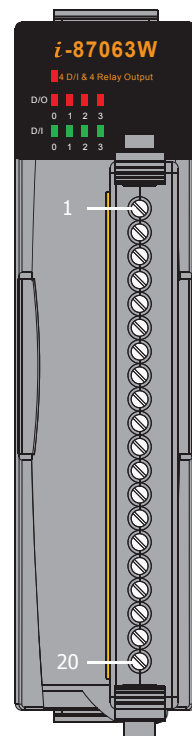
Dimensions (Units: mm)



Wire Connections

Digital Input/Counter	ON State Readback as 1	OFF State Readback as 0
Sink	OPEN or $\lt; 1\text{ V}_{DC}$	+4 ~ +30 V _{DC}
Source	OPEN or $\lt; 1\text{ V}_{DC}$	+4 ~ +30 V _{DC}
Output Type	ON State Readback as 1	OFF State Readback as 0
Relay Output		

Pin Assignments



Terminal No.	Pin Assignment
01	DI0+
02	DI0-
03	DI1+
04	DI1-
05	DI2+
06	DI2-
07	DI3+
08	DI3-
09	NO0
10	NC0
11	COM0
12	NO1
13	NC1
14	COM1
15	NO2
16	NC2
17	COM2
18	NO3
19	NC3
20	COM3

Ordering Information

I-87063W-G CR	4-channel Isolated Digital Input and 4-channel Relay Output Module with 16-bit Counters (Gray Cover) (RoHS)
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Accessories

	SG-770 CR	7 channel differential or 14 channel single-ended surge protector (RoHS)
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