



Features

- Support AC Digital Inputs
- Photocouple Isolation
- Can Be Used As Counters
- 4 kV ESD Protection
- 3750 Vdc Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 ~ +75°C



Introduction

I-87059W features AC digital inputs with isolation. Its on voltage level lies in 10V ~ 80 V_{AC}. All DI channels are also able to be used as 16-bit counters. I-87059W has 8 LED indicators for DI channel status. 4 kV ESD protection and 3750V intra-module isolation are standard.

Applications

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

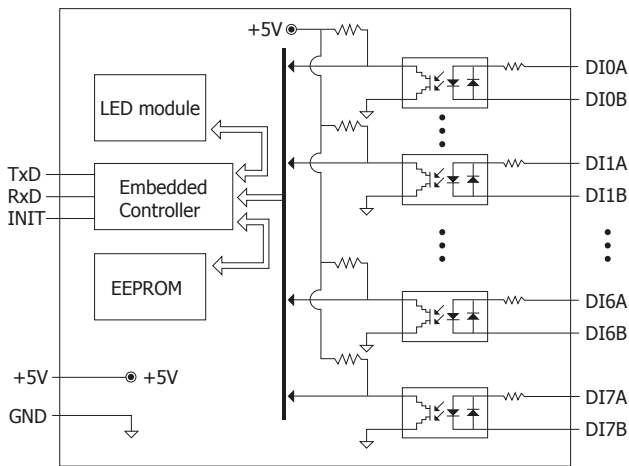
System Specifications

Communication	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Protocol	DCON
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)
LED Indicator/Display	
System LED Indicator	1 LED as Power/Communication Indicator
I/O LED Indicator	8 LEDs as Digital Input 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	0.3 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

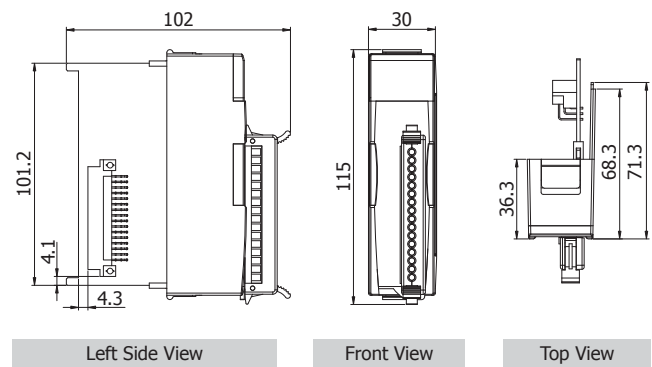
I/O Specifications

Digital Input		
Channels	8 Differential	
Type	Isolation, AC Digital Input	
Sink /Source (NPN /PNP)	-	
On Voltage Level	10 ~ 80 V _{AC}	
Off Voltage Level	3 V _{AC} Max.	
AC Frequency	47 ~ 400 Hz (> 45 Hz min)	
Input Impedance	10 KΩ, 1 W	
Counters	Channels	8
	Max. Counts	16-bit (65535)
	Max. Input Frequency	100 Hz
	Min. Pulse Width	5 ms
Channel to Channel Isolation	Yes	
Low Pass Filter	Yes	
Effective Distance for Dry Contact	-	

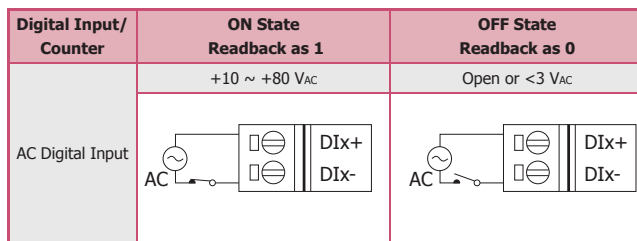
Internal I/O Structure



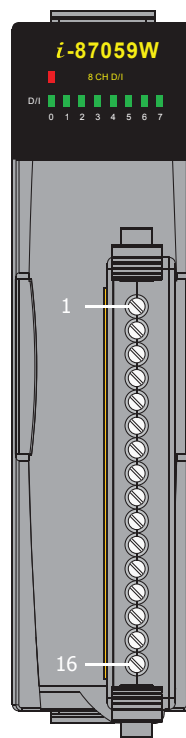
Dimensions (Units: mm)



Wire Connections



Pin Assignments



Terminal No.	Pin Assignment
01	DI0A
02	DI0B
03	DI1A
04	DI1B
05	DI2A
06	DI2B
07	DI3A
08	DI3B
09	DI4A
10	DI4B
11	DI5A
12	DI5B
13	DI6A
14	DI6B
15	DI7A
16	DI7B

Ordering Information

I-87059W-G CR	8-channel 10-80 V _{AC} Isolated Digital Input 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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