



## Introduction

The I-87037W provides 16 channels for digital output, each of which features photo couple isolation. The I-87037W supports source type output with short circuit protection and each channel can drive 700mA load. There are options for configuring power-on and safe digital output values. 4 kV ESD protection and 3750 V<sub>DC</sub> intra-module isolation are also provided to enrich the noise protection ability for industrial environment.

## Digital Output

### Features

- Source Type Digital Outputs
- Photo Couple Isolation
- 4 kV ESD Protection
- Dual Watchdog
- Power-on Value Setting
- Safe Value Setting
- Short Circuit Protection
- 3750 V<sub>DC</sub> Intra-Module Isolation
- Wide Operating Temperature Range: -25 °C ~ 75 °C
- RoHS Compliance



## Applications

- Industrial Automation
- Industrial Machinery
- Building Automation
- Food and Beverage Systems
- Semiconductor Fabrication
- Control Systems

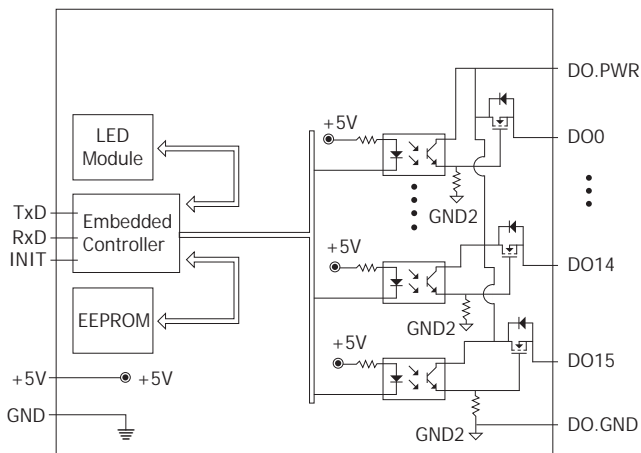
## I/O Specifications

Digital Output	
Output Channels	16
Type	Open Emitter (Source/PNP)
Max Load Current	700 mA/Channel
Load Voltage	+10 V <sub>DC</sub> ~ +40 V <sub>DC</sub>
Overvoltage Protection	47 V <sub>DC</sub>
Overload Protection	Yes
Short Circuit Protection	Yes
Power-on Value	Yes, Programmable
Safe Value	Yes, Programmable

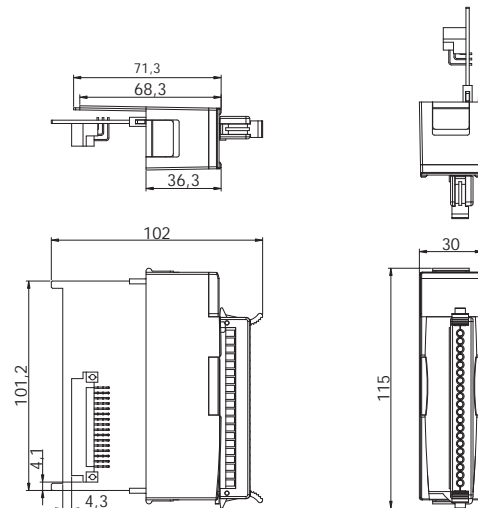
## System Specifications

Interface	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200 bps
Watchdog	
Dual Watchdog	Yes, Module (1.6 seconds) and Communication (Programmable)
LED Display	
	1 LED as Power/ Communication indicator 16 LEDs as Digital Input Indicators
Power	
Power Consumption	0.41 W
Environment	
Operating Temperature	-25 °C ~ +75 °C
Storage Temperature	-40 °C ~ +85 °C
Humidity	10 ~ 95% RH, Non-condensing
Dimensions	
	30 mm x 102 mm x 115 mm (W x L x H)

## Internal I/O Structure



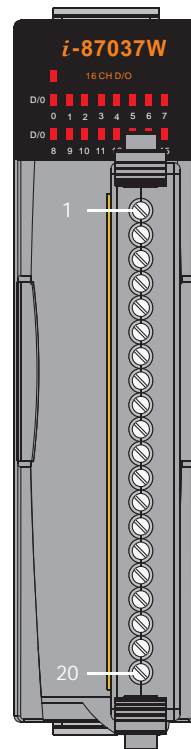
## Dimensions (Units: mm)



## Wire Connections

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
	Relay ON	Relay Off
Drive Relay		
Resistance Load		

## Pin Assignments



Terminal No.	Pin Assignment
01	DO0
02	DO1
03	DO2
04	DO3
05	DO4
06	DO5
07	DO6
08	DO7
09	DO8
10	DO9
11	DO10
12	DO11
13	DO12
14	DO13
15	DO14
16	DO15
17	DO.GND
18	DO.GND
19	DO.PWR
20	DO.PWR

## Ordering Information

I-87037W-G CR	16-channel source type Isolated Digital Output Module(RoHS)
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## Related Products

Converters	USB, RS-232, Fiber Optical to RS-485 Converters and Repeaters
Power Supply	24 Vdc Power Supply
Relay Module	External Relay Modules for 87k DO Modules
Learning Kit	Beginner Learning Kit
Application Books	Application Books Designed for Our Products
Data Logger Software	User Friendly Data Logger Software (free)