



I-87057W

I-87057PW

16-channel Open Collector Isolated Digital Output Module

Introduction

I-87057W offers 16-channel sink type digital outputs. All channels features Photocouple isolation. I-87057W has 16 LED indicators for DO channel status. 4 kV ESD protection and 3750 V intra-module isolation are standard.

I-87057PW offers 16 channels for digital output, each of which features Photo-couple isolation. I-87057PW supports sink type output with short-circuits protection. There are options for power-on value and safe value for your consideration. I-87057PW has 16 LED indicators for DO channel status. 4 kV ESD protection, 3750 VDC intra-module isolation are standard.

Features

- Support Digital Outputs (Sink Type)
- Photocouple Isolation
- 4 kV ESD Protection
- 3750 Vdc Intra-module Isolation
- RoHS Compliant
- Wide Operating Temperature Range: -25 to +75°C



Applications

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

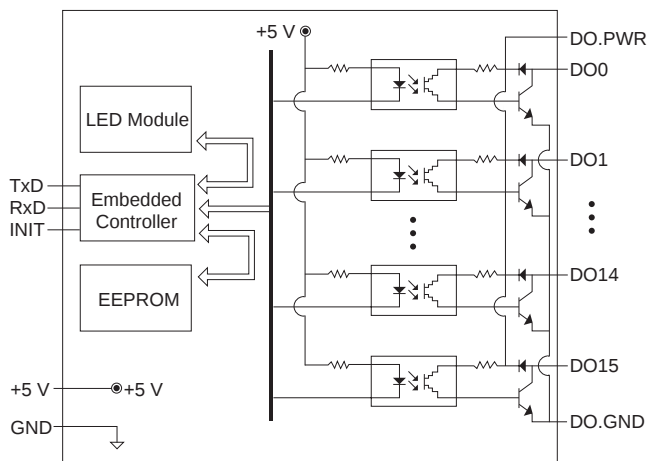
System Specifications

Model	I-87057W	I-87057PW
Communication		
Interface	RS-485	
Format	N, 8, 1	
Baud Rate	1200 to 115200 bps	
Protocol	DCON	
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)	
LED Indicators/Display		
System LED Indictors	Yes, 1 as Power/Communication Indicator	
I/O LED Indicators	16 as High/Low Alarm Signals	
Isolation		
Intra-module Isolation, Field-to-Logic	3750 Vrms	
EMS Protection		
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal	
	±8 kV Air for Random Point	
Power		
Power Consumption	1.0 W Max.	0.4 W Max.
Mechanical		
Dimensions (L x W x H)	115 mm x 30 mm x 102 mm	
Environment		
Operating Temperature	-25 to +75°C	
Storage Temperature	-40 to +85°C	
Humidity	10 to 95% RH, Non-condensing	

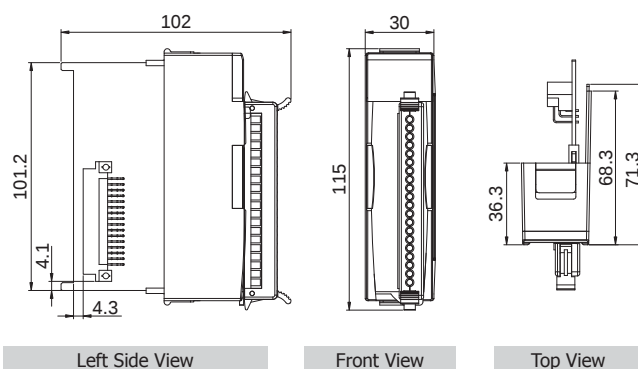
I/O Specifications

Model	I-87057W	I-87057PW
Digital Output		
Channels	16	
Type	Open Collector	
Sink/Source (NPN/PNP)	Sink	
Load Voltage	5 Vdc ~ 30 Vdc	+5 Vdc ~ +50 Vdc
Max. Load Current	100 mA/channel	700 mA/channel
Output Voltage	-	+3.5 Vdc ~ +50 Vdc
Output Current	-	700 mA per Channel, Direct Drive Power Relay Module
Overvoltage Protection	-	60 Vdc
Overload Protection	-	Yes
Short-circuit and Overcurrent Protection	-	Yes, 1.4 A
Thermal Overload Trip Temperature	-	150°C
Power-on Value	Yes	
Safe Value	Yes	

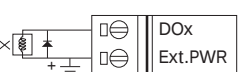
Internal I/O Structure



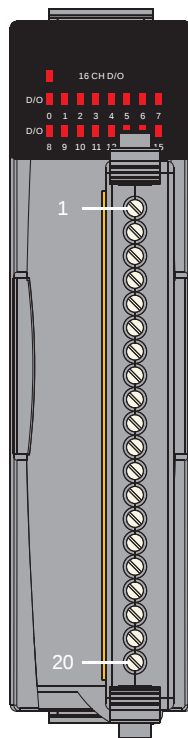
📏 Dimensions (Units: mm)



Wire Connections

Output Type	ON State Readback as 1	OFF State Readback as 0
Digital Output (Resistance Load)		
Digital Output (Inductive 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-87057W-G CR	16-channel Open Collector Isolated Digital Output Module (Gray Cover) (RoHS)
I-87057PW-G CR	16-channel Open Collector Isolated Digital Output Module (Gray Cover) (RoHS)

Accessories

	RM-104/108/116	4/8/16-channel 16A Power Relay Board, 1 Form C
	RM-204/208/216	4/8/16-channel 8A Power Relay Board, 2 Form C
	DN-SSR4	4-channel 1A Solid-state Relay Board, 1 Form A

	RM-22.22	1-channel 20 A Power Relay for Direct 35 mm Rail (EN 50022) Mounting, 2 Form A
	SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)