

**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

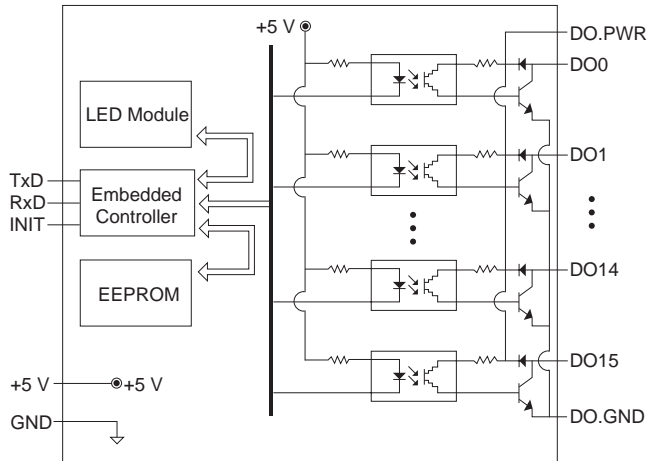
System Specifications

| 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 | |

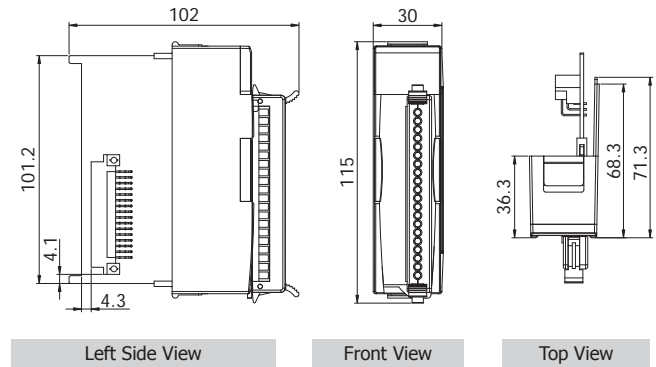
I/O Specifications

| 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) |