



I-87069W I-87069PW

8-channel PhotoMOS Relay Output Module

Introduction

Both the I-87069W and the I-87069PW features eight Form A PhotoMOS relay output channels. In comparison to electromechanical relays, the PhotoMOS relays provide a faster response time, greater electrical endurance, higher vibration and shock resistance. There are also no arcing, no bounce, and no switching noise for the PhotoMOS relay. There are options for configuring power-on and safe digital output values, and both the I-87069W and the I-87069PW each include eight LED indicators that are used to display channel status as well as providing 4 kV ESD protection.

System Specifications

Model	I-87069W	I-87069PW
Communication		
Interface	RS-485	
Format	(N, 8, 1), (N, 8, 2), (O, 8, 1), (E, 8, 1)	
Baud Rate	1200 to 115200 bps	
Protocol	DCON	
Dual Watchdog	Yes, Module (1.6 seconds), Communication (Programmable)	
LED Indicators/Display		
System LED Indicators	Yes, 1 as Power Indicator	
I/O LED Indicators	8 as PhotoMOS Output Indicators	
Isolation		
Intra-module Isolation, Field-to-Logic	5000 VDC	2000 VDC
EMS Protection		
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal ±8 kV Air for Random Point	
EFT (IEC 61000-4-4)	±4 kV for Power	
Power		
Power Consumption	0.3 W (Max.)	
Mechanical		
Dimensions (L × W × H)	115 mm × 30 mm × 102 mm	
Environment		
Operating Temperature	-25 to +75°C	
Storage Temperature	-30 to +75°C	
Humidity	10 to 95% RH, Non-condensing	

Features

- 8 PhotoMos Relay Outputs
- 4 kV ESD Protection
- No Arcing, No Bounce, and No Switching Noise
- Photocouple Isolation
- Embedded Dual Watchdog
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- Wide Operating Temperature Range: -25 to +75°C



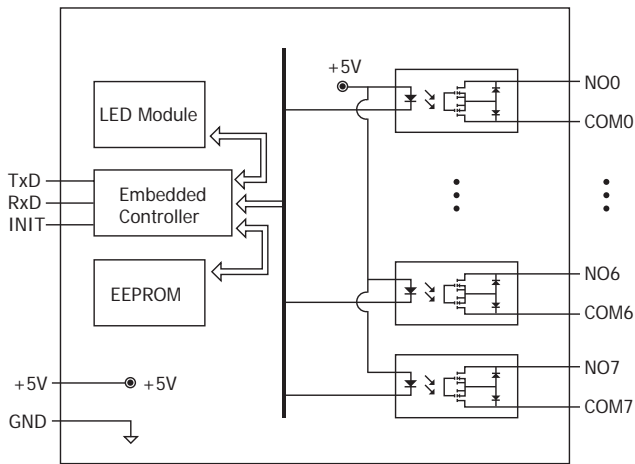
Applications

- All TypeS of On/Off Control
- Industrial Automation
- Industrial Machinery
- Building Automation
- Food and Beverage Systems
- Semiconductor Fabrication
- Control Systems

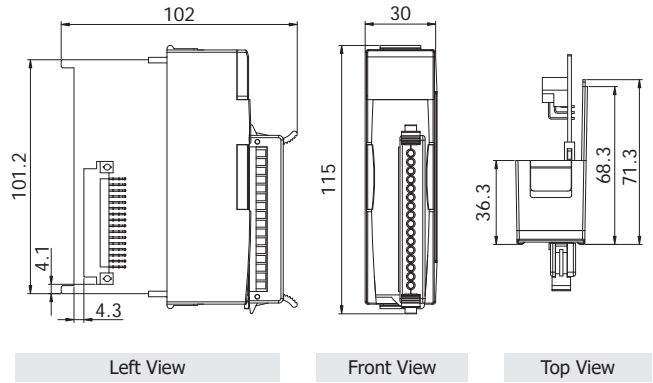
I/O Specifications

Model	I-87069W	I-87069PW
PhotoMOS Relay Output		
Output Channels	8	
Relay Type	PhotoMOS Relay, Form A	
Operating Load Voltage Range	350 V (AC peak or DC)	80 V (AC peak or DC)
Continous Load Current	0.13 A	1 A
Peak Load Current	0.4 A	3 A
Output Off State Leakage Current	1 uA	
Operating Time	2 ms (Max.)	5 ms (Max.)
Release Time	1 ms (Max.)	0.5 ms (Max.)
Electrical Endurance	No Arcing, No Bounce, and No Switching Noise	
Power-on Value	Yes	
Safe Value	Yes	

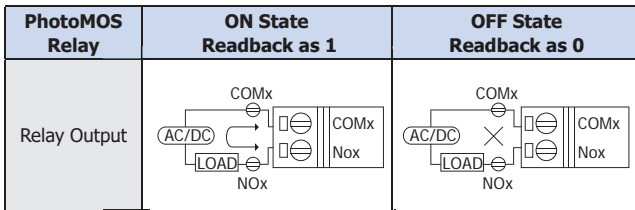
Internal I/O Structure



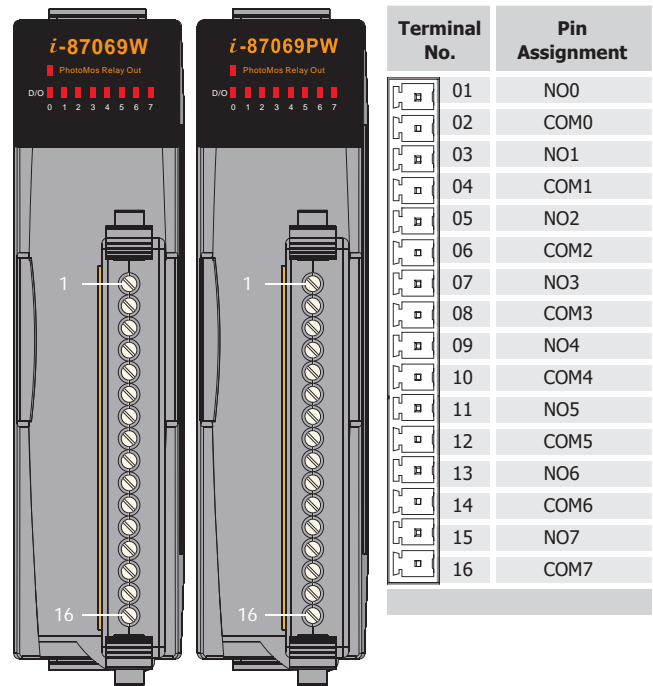
Dimensions (Units: mm)



Wire Connections



Pin Assignments



Ordering Information

I-87069W-G CR	8-channel PhotoMOS Relay Output Module (Gray Cover) (RoHS)
I-87069PW-G CR	8-channel PhotoMOS Relay Output Module (Gray Cover) (RoHS)

Accessories

	SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)
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