





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.

₱ 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









Applications

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

System Specifications

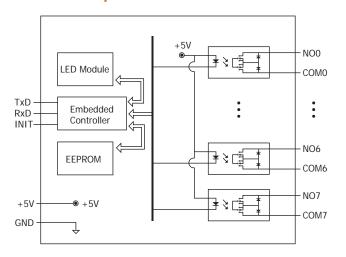
Model	I-87069W	I-87069PW		
Communication				
Interface	RS-485			
Format	(N, 8, 1), (N, 8, 2), (O, 8, 1), (E, 8, 1)			
Baud Rate	1200 to 115200 bps			
Protocol	DCON			
Dual Watchdog	Yes, Module (1.6 seconds), Communication (Programmable)			
LED Indicators/Display				
System LED Indictors	Yes, 1 as Power 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 (W × L × H)	30 mm × 115 mm × 102 mm			
Environment				
Operating Temperature	-25 to +75°C			
Storage Temperature	-30 to +75°C			
Humidity	10 to 95% RH, Non-condensing			

■ I/O Specifications

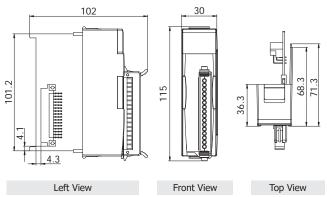
Model	I-87069W	I-87069PW
PhotoMOS Relay Output		
Output Channels	8	
Relay Type	PhotoMOS Relay, Form A	
Operating Load Voltage Range	350 V (AC peak or DC)	80 V (AC peak or DC)
Continous Load Current	0.13 A	1 A
Peak Load Current	0.4 A	3 A
Output Off State Leakage Current	1 uA	
Operating Time	2 ms (Max.)	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	

ICP DAS CO., LTD Website: http://www.icpdas.com Vol. 2020.10 1/2

■ Internal I/O Structure



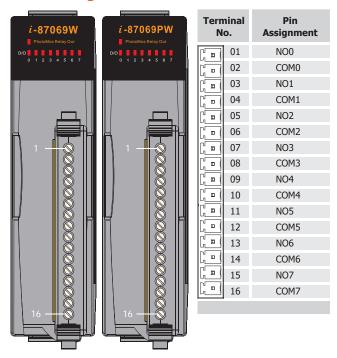
■ Dimensions (Units: mm)



■ Wire Connections

PhotoMOS	ON State	OFF State	
Relay	Readback as 1	Readback as 0	
Relay Output	COMX AC/DO COMX NOX	COMX AC/DC X LOAD NOX	

■ 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)