



**I-7066**

**I-7066D**

**M-7066P**

**M-7066PD**

7-channel PhotoMos Relay Output Module

## Features

- I-7066(D)
  - PhotoMOS Relay: 0.13 A @ 350 V (AC peck or DC)
- M-7066P(D)
  - PhotoMOS Relay: 1 A @ 80 V (AC peck or DC)
- 7 PhotoMOS Relay Outputs
- 4 kV ESD Protection
- No Arcing, No Bounce, and No Switching Noise
- Photocouple Isolation
- Built-in Dual Watchdog
- Configurable Power-on Value Settings
- Configurable Safe Value Settings
- Wide Operating Temperature Range: -25 to +75°C



## Introduction

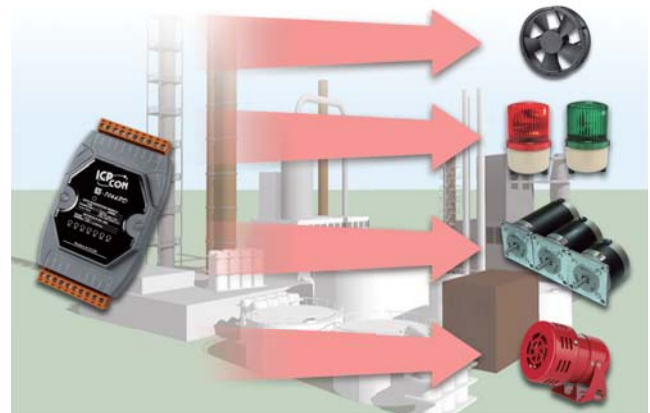
Both the I-7066 and the M-7066P feature seven Form A PhotoMOS relay output channels. In comparison to electromechanical relays, the PhotoMOS relays provide a faster response time, greater electrical endurance, higher vibration and shock resistance. There are also no arcing, no bounce, and no switching noise for the PhotoMOS relay. There are options for configuring power-on and safe digital output values, and both the I-7066D and the M-7066PD each include seven LED indicators that are used to display channel status as well as providing 4 kV ESD protection.

## System Specifications

Model	I-7066	I-7066D	M-7066P	M-7066PD
<b>Communication</b>				
Interface	RS-485			
Bias Resistor	No (Usually supplied by the RS-485 Master. Alternatively, add a tM-SG4 or SG-785.)			
Format	(N, 8, 1), (N, 8, 2), (E, 8, 1), (O, 8, 1)			
Baud Rate	1200 to 115200 bps			
Protocol	DCON		DCON, Modbus RTU	
Dual Watchdog	Yes, Module (1.6 Seconds), Communication (Programmable)			
<b>LED Indicators/Display</b>				
System LED Indicator	Yes, 1 as Power/Communication Indicator			
I/O LED Indicators	-	Yes, 7 LEDs as Relay Output Indicators	-	Yes, 7 LEDs as Relay Output Indicators
7-segment LED Display	-			
<b>Isolation</b>				
Intra-module Isolation, Field-to-Logic	5000 Vdc		2000 Vdc	
<b>EMS Protection</b>				
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal			
	±8 kV Air for Random Line			
EFT (IEC 61000-4-4)	±4 kV for 8 Relay and Power Line			
	±2 kV for RS-485 Port Line			
Surge (IEC 61000-4-5)	-			
<b>Power</b>				
Reverse Polarity Protection	Yes			
Input Voltage Range	+10 ~ +30 Vdc			
Consumption	0.4 W	0.8 W	0.5 W	0.9 W
<b>Mechanical</b>				
Dimensions (L x W x H)	123 mm x 72 mm x 35 mm			
Installation	DIN-Rail or Wall Mounting			
<b>Environment</b>				
Operating Temperature	-25 to +75°C			
Storage Temperature	-40 to +85 °C			
Humidity	10 to 95% RH, Non-condensing			

## Applications

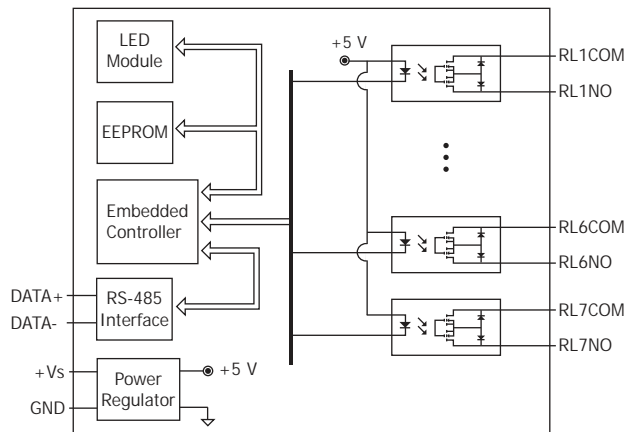
- Building Automation
- Machine Automation
- Remote Diagnosis
- Factory Automation
- Remote Maintenance
- Testing Equipment



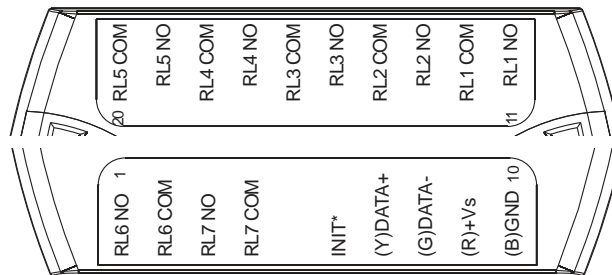
## I/O Specifications

Model	I-7066	I-7066D	M-7066P	M-7066PD	
<b>Relay Output</b>					
Channels	7				
Relay Type	Power Relay (Form A)				
Form A PhotoMOS Relay	Operating Load Voltage Range	350 V (AC peck or DC)		80 V (AC peck or DC)	
	Continuous Load Current	0.13 A		1 A	
	Peak Load Current	0.4 A		3 A	
	Output Off State Leakage Current	1 uA			
	Operate Time	2 ms (Max.)		5 ms (Max.)	
	Release Time	1 ms (Max.)		0.5 ms (Max.)	
	Electrical Endurance	Long Life, And No Arcing, No Bounce, And No Switching Noise			
Power-on Value	Yes, Programmable				
Safe Value	Yes, Programmable				

## Internal I/O Structure



## Pin Assignments



## Wire Connections

Relay Output	ON State Readback as 1	OFF State Readback as 0
Relay Output		

## Ordering Information

<b>I-7066 CR</b>	7-channel Photo-Mos Relay Output Module using the DCON Protocol (Blue Cover) (RoHS)
<b>I-7066D CR</b>	I-7066 with LED Display (Blue Cover) (RoHS)
<b>M-7066P CR</b>	7-channel PhotoMOS Relay Output Module using the DCON and Modbus Protocols (Gray Cover) (RoHS)
<b>M-7066PD CR</b>	M-7066P with LED Display (Gray Cover) (RoHS)

## Accessories

	tM-7520U CR	RS-232 to RS-485 Converter (RoHS)
	tM-7561 CR	USB to RS-485 Converter (RoHS)
	tM-SG4 CR	RS-485 Bias and Termination Resistor Module (RoHS)
	I-7514U CR	4-channel RS-485 Hub (RoHS)
	SG-770 CR	7-channel Differential or 14-channel Single-ended Surge Protector (RoHS)
	SG-3000 Series	Signal Conditioning Modules for Thermocouple, RTD, DC Voltage, DC Current and Power Input Transformers