



M-7055-NPN

M-7055D-NPN

**M-7055-NPN/
M-7055D-NPN**
8-channel Isolated Digital Input and 8-channel Sink Type Isolated Digital Output Module

Introduction

M-7055-NPN offers 8 channels for digital output and 8 channels for digital input. M-7055-NPN 8 channels for digital output each of which features Photo-couple isolation, supports sink type output with short-circuits protection. There are options for power on value and safe value for your consideration. Moreover, you can choose sink type or source type input by wire connections. All channels are able to be used as 16-bit counters. M-7055D-NPN has 8 LED indicators for DO channel status and 8 LED indicators for DI channel status. 4 kV ESD protection, 4 kV EFT protection, 3 kV Surge Protection for Power Input and 3750 VDC intra-module isolation are standard.

Features

- Digital Outputs for Sink Type
- Support Digital Inputs (Sink Type or Source Type)
- Photo Couple Isolation
- Can Be Used As Counters
- 4 kV ESD and EFT Protection
- 3 kV Surge Protection for Power Input
- Dual Watchdog
- Power On Value Setting
- Safe Value Setting
- Short Circuit Protection
- 3750 VDC Intra-Module Isolation
- A Wide Range of Operating Temperature: -25 °C ~ 75 °C
- RoHS Compliance

Specifications

Digital Input	
Channels	8
Input Type	Dry Contact: Source, Wet Contact: Sink or Source
Dry Contact Level	Off Voltage Level : Open
	On Voltage Level : Close to GND
Wet Contact Level	Off Voltage Level : +4V max.
	On Voltage Level : +10 V ~ +50 V
Input Impedance	10 K Ohms, 0.5 W
Counters	channels : 8
	Max. Counts : 16-bit (65535)
	Max. Input Frequency : 100Hz
	Min. Pulse Width : 5ms
Photo-Isolation	3750 VDC
Digital Output	
Channels	8, Sink(NPN)
Output Voltage	+3.5 ~ +50 V
Output Current	700mA per channel, Direct drive power relay module
Intra-module Isolation, Field to Logic	3750 VDC
Overvoltage Protection	60 VDC
Overload Protection	Yes
Short-circuit and Overcurrent Protection	1.4 A
Thermal Overload trip temperature	150 °C

Interface	
Interface	RS-485
Format	N, 8, 1
Baud Rate	1200 ~ 115200bps
LED Display	
1 LED as Power/Communication indicator	
8 LEDs as Digital Input indicators and 8 LEDs as Digital Output indicators (for I-7055D-NPN)	
Power	
Input Voltage Range	10 ~ 30 VDC
Power Consumption	1.2W (M-7055-NPN)/2.2W (M-7055D-NPN)
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 8DO and Power ±2 kV for RS-485 port
Surge (IEC 61000-4-5)	±3 kV for power liner
Environment	
Operating Temperature	-25 ~ 75°C
Storage Temperature	-40 ~ 85°C
Humidity	10 ~ 95% RH, non-condensing

Ordering information

M-7055-NPN	8-channel Isolated Digital Input and 8-channel Isolated Digital Output Module with 16-bit Counters
M-7055D-NPN	M-7055D with LED Display