



Hermetically Sealed Long-Lasting Relays

Overview

The SDM8X50 is a 50 ohm, coaxial, 8:1 multiplexer used in a Campbell Scientific time-domain reflectometer system. It consists of a surge-protected multiplexer circuit board enclosed in a metal housing and a separate strain-relief bracket for the coaxial cables. Both the multiplexer housing and strain relief bracket have holes drilled at a 1 in. spacing. This enables you to mount the SDM8X50 to a wall or attach

it to the backplate of a user-supplied enclosure or Campbell Scientific enclosure.

When you purchase the SDM8X50 with the -E option, a 10 x 12 x 4.5 in. environmental enclosure and enclosure supply kit are included. Other compatible Campbell Scientific enclosures that you may purchase separately include the [ENCTDR100](#), [ENC12/14](#), [ENC14/16](#), and [ENC16/18](#).

Benefits and Features

- ▶ Longer lasting relays; 20 times more operations than SDM8X50 relays
- ▶ Non-latching relays provide better surge protection
- ▶ Hermetically sealed relays are more stable and do not become coated with a non-conducting film
- ▶ Quiet operation

Specifications

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| Operating Temperature Range | -40° to +55°C |
| Multiplexer Housing Dimensions | 24.9 x 12.2 x 4.6 cm (9.8 x 4.8 x 1.8 in.) with mounts |
| Strain Relief Bracket Dimensions | 20.3 x 4.3 x 1.3 cm (8.0 x 1.7 x 0.5 in.) |
| Multiplexer Weight | 590 g (1.3 lb) |

Power Requirements

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| Input Power | 12 Vdc |
| Quiescent Current Drain | < 1 mA |

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| Current Drain during Switching | ~ 90 mA (All multiplexers of the same level switch simultaneously for less than 1 s.) |
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| Relay Contact Life Expectancy | 100 x 10 ⁶ operations (at 5 V and 10 mA) |
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Enclosure (-E option)

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| Outside Dimensions | 40.4 x 29.2 x 17.5 cm 15.9 x 11.5 x 6.9 in.) with mounts |
| Inside Dimensions | 25.4 x 30.4 x 11.4 cm (10 x 12 x 4.5 in.) |
| Weight | 4.1 kg (9.0 lb) |

For comprehensive details, visit: www.campbellsci.eu/sdm8x50 