



SDM8X50

8-Channel 50 Ohm Coaxial Multiplexer for TDR Systems



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 SDM50 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

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

Input Power	12 Vdc
Quiescent Current Drain	< 1 mA
Current Drain during Switching	~ 90 mA (All multiplexers of the same level switch simultaneously for less than 1 s.)
Relay Contact Life Expectancy	100 x 10 ⁶ operations (at 5 V and 10 mA)



Enclosure (-E option)

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.com/sdm8x50 



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