

MEMS MULTI-MODE RACKMOUNT 1xN ARRAY OPTICAL SWITCH

DiCon's MEMS Multi-Mode Rackmount 1xN Array Optical Switch allows for the precise control of multiple 1xN optical switches through a single control interface. The array of optical switches can be controlled individually or synchronously, and are bidirectional so they can be used in either a 1xN or Nx1 orientation.

DiCon's MEMS 1xN optical switches offer excellent optical performance, high reliability over a very long lifetime. They have been tested and proven in the telecommunication, aerospace and other demanding applications.



FEATURES

- Proven MEMS Durability and Reliability
- Compact Form Factor
- Fast Switching Time

APPLICATIONS

- Bio-medical Instrumentation
- Fiber Sensing
- Video Distribution



MEMS MULTI-MODE RACKMOUNT 1XN ARRAY OPTICAL SWITCH

OPTICAL SPECIFICATIONS¹

PARAMETER		RATING
Insertion Loss ^{2,3,4}	Up to 1x4	1.0 dB max.
	Up to 1x8	1.4 dB max.
Crosstalk ⁵	50 μm	-25 dB max.
	62.5 μm	-20 dB max.
Back Reflection		-20 dB max.
Switching Time		30 ms max.
TDL		0.4 dB max.
Repeatability ⁶		0.04 dB max.
Durability		10 ⁹ cycles min.
Optical Power		500 mW max.
Operating Temp		-5 to 70°C
Storage Temp		-40 to 85°C
Fiber Type		Multi-mode

- Specifications are without connectors.
- IL is measured at specified wavelength, 23°C.
- IL is for standard transparent model.
- IL is for single-band. Dual-band adds 0.4 dB.
- Power off isolation is same as crosstalk.
- Repeatability is defined after 100 cycles.

ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Latching Type		Non-Latching
Vcc Voltage		100 - 240 VAC
Control Type		Ethernet or RS232
Connector Type	Ethernet	RJ45
	RS-232	9-Pin DB9

FRONT PANEL CONNECTOR & CHASSIS OPTIONS¹

CHASSIS SIZE	FC	SC	LC
1U	1x42	1x54	1x84
2U	1x72	1x80	1x144
4U	1x230	1x225	1x380

- Maximum 1xN size based on connector spacing and chassis size.

ORDERING INFORMATION

MSR - / - - - - - - B -

Product Code

MSR MEMS
Rackmount
Switch

Number of Switches

M # of Switches
Specify M ≤ 16

Switch Configuration

1xN 1xN Switch
Specify N ≤ 8 for 50um
Specify N ≤ 4 for 62.5um

Housing Type

1U 1U Rackmount
2U 2U Rackmount
4U 4U Rackmount

Control Interface

ETH Ethernet
RS2 RS232
E/R Ethernet & RS232
Only one control interface can be selected at a time.

Wavelength Range

8 850 nm only
9 980 nm only
8/13 850 & 1310 nm
Other wavelengths available upon special request

Fiber Type

50 50 μm core
62 62.5 μm core

Connector Type

FC FC/PC
LC LC/PC
SC SC/PC
ST ST/PC
N NONE
Other connector types available upon request

Port Type

B Bulkhead Adaptors

Port Location

F Front Panel
R Rear Panel