

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

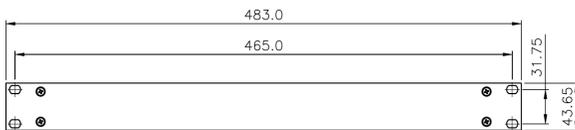
OPTICAL SPECIFICATIONS^{1,2}

PARAMETER		RATING
Insertion Loss ^{3,4}	Up to 1x4	1.0 dB max.
	Up to 1x8	1.4 dB max.
Crosstalk ⁵	50 μ m	-25 dB max.
	62.5 μ m	-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.
- Aligned transparent to channel 1.
- IL is measured at specified wavelength, 23°C \pm 5°C.
- IL is for single-band. Dual-band adds 0.4 dB.
- Optical off state isolation is the same as crosstalk.
- Repeatability is defined within 100 cycles.

MECHANICAL DIMENSIONS

1U 19" RACKMOUNT CHASSIS



FRONT PANEL CONNECTOR & CHASSIS OPTIONS¹

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

1. 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 \leq 16

Switch Configuration

1xN 1xN Switch
Specify N \leq 8 for 50 μ m
Specify N \leq 4 for 62.5 μ m

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 μ m core
62 62.5 μ m 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

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