

# MEMS MULTI-MODE RACKMOUNT 1XN OPTICAL SWITCH

CONFIGURABLE UP TO 1X64

DiCon's MEMS Multi-Mode Rackmount 1xN Optical Switch allows a common input fiber to be switched to any one of N output fibers. Based on DiCon's industry proven MEMS optical switches, this system offers reliable switching over a very long lifetime.



## FEATURES

- Proven MEMS Durability and Reliability
- Available in any 1xN size up to 1x64
- Fast Switching Time
- Simple Rackmount Design

## APPLICATIONS

- Fiber Monitoring
- Fiber Sensing
- Test & Measurement



# MEMS MULTI-MODE RACKMOUNT 1XN OPTICAL SWITCH

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## OPTICAL SPECIFICATIONS<sup>1</sup>

PARAMETER		RATING
Insertion Loss <sup>2,3</sup>	Up to 1x4	1.0 dB max.
	Up to 1x8	1.4 dB max.
	Up to 1x16	1.6 dB max.
	Up to 1x24	2.0 dB max.
	Up to 1x64	2.4 dB max.
Crosstalk <sup>4</sup>	50 μm	-25dB max.
	62.5 μm	-20dB max.
Back Reflection		-20 dB max.
Switching Time	Up to 1x4	20 ms max.
	Up to 1x16	30 ms max.
	Up to 1x64	40 ms max.
TDL		0.4 dB max.
Repeatability <sup>5</sup>		0.04 dB max.
Durability		10 <sup>9</sup> 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 single-band. Dual-band adds 0.6 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

## ORDERING INFORMATION

MSR -  -  -  -  -  -  - B -

### Product Code

MSR MEMS Rackmount Switch

### Switch Configuration

1xN 1xN Switch  
Specify N≤64 for 50um or N≤16 for 62.5um

### Housing Type

1U 1U Rackmount  
2U 2U Rackmount

### Control Interface

ETH Ethernet  
RS2 RS232

### Wavelength Range

8 850 nm only  
9 980 nm only  
8/13 850 & 1290 -1330 nm  
*Other wavelengths available upon special request*

### Fiber Type

50 50μm core  
62 62.5μm 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

## FRONT PANEL CONNECTOR & CHASSIS OPTIONS<sup>1</sup>

CHASSIS SIZE	FC	SC	LC
1U	1x42	1x54	1x84
2U	1x72	1x80	1x144

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