

# MEMS RACKMOUNT SINGLE-MODE MODULAR MATRIX OPTICAL SWITCH

DiCon's MEMS Rackmount Modular Matrix Optical Switch is based on an arrangement of DiCon's industry proven MEMS 1xN optical switches, and allows any input to connect to any output in a non-blocking, all-optical cross-connect configuration.



## FEATURES

- Available in any MxN Size up to 8x8
- Proven DiCon MEMS Technology
- Easy-To-Use Rackmount Housing
- Ethernet or RS232 Interface

## APPLICATIONS

DiCon Fiberoptics offers a rackmount version of the Modular Matrix Optical Switch for research and production environments, and is used to share valuable resources in a automated, reliable manner.



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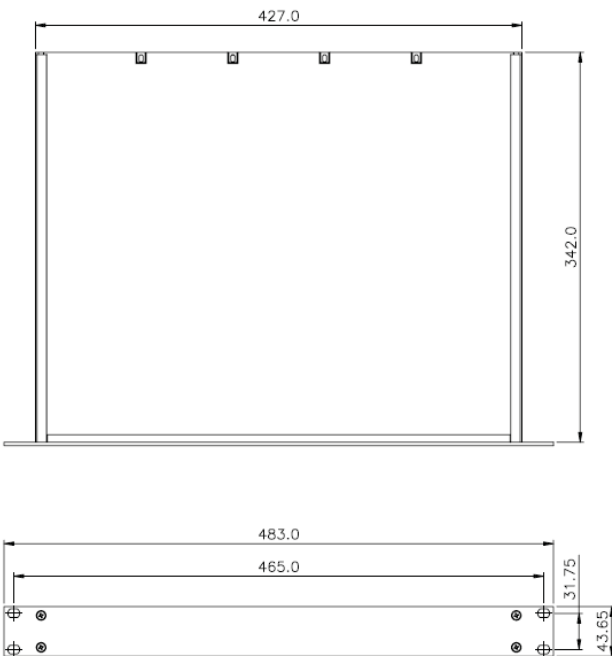
## OPTICAL SPECIFICATIONS<sup>1</sup>

PARAMETER		RATING
Insertion Loss <sup>2,3</sup>	4x4	1.4 dB max.
	8x8	1.6 dB max.
Crosstalk		-70 dB max.
Back Reflection		-50 dB max.
Switching Time		30 ms max.
TDL		0.4 dB max.
WDL <sup>4</sup>		0.3 dB max.
PDL		0.15 dB max.
Repeatability <sup>5</sup>		0.04 dB max.
Durability		10 <sup>9</sup> cycles min.
Optical Power		500 mW max.
Operating Temperature		-5 to 70°C
Storage Temperature		-40 to 85°C
Fiber Type		9/125 μm single-mode

- All specifications are without connectors.
- Insertion Loss measured at CWL, 23°C
- IL is for single-band. Dual-band adds 0.2 dB.
- WDL is specified in +/- 20nm range at 23°C
- Repeatability is defined after 100 cycles.

## MECHANICAL DIMENSIONS

### 1U 19" RACKMOUNT CHASSIS



## ORDERING INFORMATION

MXR -  - 1U -  -  - 9 -  - B -

### Product Code

MXR MEMS Rackmount Matrix Switch

### Switch Configuration

MxN MxN Non-Blocking Specify M,N ≤ 8

### Housing Type

1U 1U Rackmount

### Control Interface

ETH Ethernet  
RS2 RS232  
E/R Ethernet & RS232

*Only one control interface can be selected at a time.*

### Wavelength Range

13 1290 - 1330 nm  
15 1530 - 1570 nm  
16 1570 - 1610 nm  
13/15 1290 - 1330 & 1530 - 1570 nm  
15/16 1530 - 1570 & 1570 - 1610 nm

### Fiber Type

9 Corning SMF-28  
*Or other equivalent 9μm Single-mode fiber*

### Connector Type

FC/SPC FC/SPC  
FC/APC FC/APC  
MTP MTP  
*Also Available: SC, SC/UFC, SC/APC, ST, ST/UFC, LC*

### Port Type

B Bulkhead Adaptors

### Port Location

F Front Panel  
R Rear Panel

## ELECTRICAL SPECIFICATIONS

PARAMETER		RATING
Control Type		Ethernet or RS232
Input Voltage		90 - 264 VAC
Connector Type	Ethernet	RJ45
	RS232	9 Pin DB9