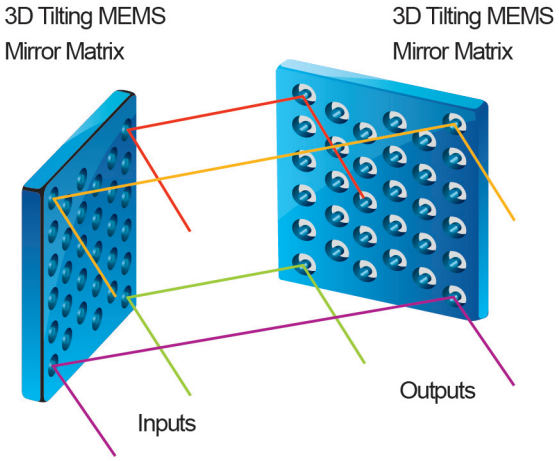
96x96 MEMS 3D RACKMOUNT MATRIX OPTICAL SWITCH

DiCon's MEMS Rackmount 3D Matrix Optical Switch is a proprietary optical switch structure that allows the simultaneous connection of multiple input to output fibers in a non-blocking, all-optical cross-connect configuration.

OPERATING PRINCIPLE (ANY PORT TO ANY PORT FUNCTIONALITY)



FEATURES

- Available in any MxN Size up to 96x96
- Proven DiCon MEMS Technology
- Easy-To-Use Rackmount Housing
- Ethernet or RS232 Interface

APPLICATIONS

DiCon Fiberoptics offers a rackmount version of the 3D Matrix Optical Switch for research and production environments, and is used to share valuable resources in an automated, reliable manner.

DiCon FIBEROPTICS

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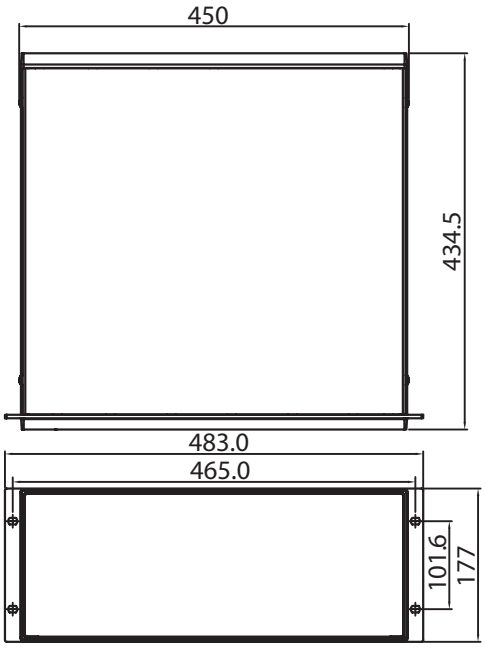
OPTICAL SPECIFICATIONS[1]

PARAMETER		RATING
Insertion Loss[2]	64x64	0.8 dB typ. 1.4 dB max.
	96x96	0.8 dB typ. 1.4 dB max.
Crosstalk		-70 dB typ. -55 dB max.
Back Reflection		-55 dB typ. -45 dB max.
Switching Time		15 ms typ. 20 ms max.
TDL		0.1 dB typ. 0.4 dB max.
WDL[3]		0.1 dB typ. 0.4 dB max.
PDL		0.08 dB typ. 0.25 dB max.
Repeatability[4]		0.01 dB typ. 0.06 dB max.
Durability		10^9 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

1. All specifications are without connectors for the set wavelength band index.
Note: Each wavelength band has it's own wavelength index, which can be set to optimized the optical performance for that band. Only one wavelength index band can be selected at a time and it applies to all the ports on the module.
2. IL is measured at CWL for the set wavelength index at 23°C +/- 5°C. Operation in 1290-1330nm or 1570-1610 nm bands add 0.1 dB to the typical IL and add 0.2 dB to the maximum insertion loss.
3. WDL is measured from CWL in a +/- 20nm range at 23°C +/- 5°C.
4. Repeatability is defined within 100 cycles.

MECHANICAL DIMENSIONS

4U 19" RACKMOUNT CHASSIS



ORDERING INFORMATION

MXR - ☐ - 4U - ☐ - ☐ - 9 - ☐ - B - ☐

Product Code

MXR	MEMS Rackmount Matrix Switch

Switch Configuration

MxN/3D	3D MxN Non-Blocking (Specify M,N ≤ 96)

Housing Type

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

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

Other wavelengths available upon special request

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/UPC, SC/APC, ST, ST/UPC, 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

DiCon Fiberoptics, Inc. 1689 Regatta Blvd. Richmond, CA 94804 Tel. (510) 620-5000 Fax. (510) 620-4100 www.diconfiberoptics.com