MEMS RACKMOUNT SINGLE-MODE 1XN SWITCH
CONFIGURABLE UP TO 1x128

DiCon's MEMS Rackmount Single-mode 1xN 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 1x128
- Lifetime over 1 billion switch cycles
- Simple rackmount design

APPLICATIONS

- Fiber Monitoring
- Fiber Sensing
- Test & Measurement

DiCon
FIBEROPTICS, INC

MEMS RACKMOUNT SINGLE-MODE 1XN SWITCH

CONFIGURABLE UP TO 1x128

OPTICAL SPECIFICATIONS[1]

PARAMETER		RATING
Insertion Loss[2,3]	Up to 1x8	0.8 dB max.
	Up to 1x12	1.2 dB max.
	Up to 1x32	1.5 dB max.
	Up to 1x48	1.9 dB max.
	Up to 1x96	2.0 dB max.
	Up to 1x128	2.4 dB max.
Crosstalk[4]		-50 dB max.
Back Reflection		-50 dB max.
Switching Time		40 ms max.
TDL		0.40 dB max.
WDL[5]		0.30 dB max.
PDL[6]		0.10 dB max.
Repeatability[7,8]		0.02 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		9/125 μm single mode

1. Specifications are without connectors.
2. IL is for single band. Dual-Band adds 0.2 dB
3. IL is measured at CWL, 23°C.
4. Power off isolation is same as crosstalk.
5. WDL is measured in a +/- 20nm range at 23°C.
6. PDL is for single-band. Dual-band adds 0.05 dB.
7. Repeatability is defined after 100 cycles.
8. Add 0.02 dB for switches with more than 12 channels.

ELECTRICAL SPECIFICATIONS

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

ORDERING INFORMATION

MSR - ☐ - ☐ - ☐ - ☐ - 9 - ☐ - B - ☐

Product Code
MSR   MEMS Rackmount Switch

Switch Configuration
1xN   1xN, Specify N≤128

Housing Type
1U   1U Rackmount
2U   2U Rackmount
4U   4U Rackmount

Control Interface
ETH   Ethernet
RS2   RS232

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 Singlemode 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

FRONT PANEL CONNECTOR & CHASSIS OPTIONS[1]

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

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