DiCon MEMS MxN MATRIX OPTICAL SWITCH

AVAILABLE EXCLUSIVELY FROM EXFO

Optimized for use with EXFO systems and software control, the DiCon Fiberoptics MXS-9100 MEMS MxN Matrix Optical Switch allows any input fiber to connect to any output fiber in a fully non-blocking manner.

DiCon's all-optical cross-connect technology provides the unique combination of low insertion loss, fast switching and very high reliability required by engineers in their lab or manufacturing environments.

With its remote-control capabilities using Standard Commands for Programmable Instruments (SCPI) over Ethernet, the MXS-9100 is the perfect solution for sharing centralized instruments or automated tests in manufacturing.

KEY FEATURES

- Available as 2x8, 2x16, 4x4, 4x8, 4x12, 4x16, 8x8, 16x16, 24x24 and 32x32
- Protocol and bit rate independent
- Fast switching time
- High reliability with lifetime > 10^9 Cycles
- SCPI over Ethernet remote-control capabilities
- User configurable Auto-Save feature that restores switch states after a power cycle

DICON MEMS MXN MATRIX OPTICAL SWITCH

OPTICAL SPECIFICATIONS[1]

PARAMETER		RATING
Insertion Loss[2,3]	2x8	1.2 dB max. @ 1310 & 1550 nm 1.6 dB max. @ 1625 & 1650 nm
	2x16	1.5 dB max. @ 1310 & 1550 nm 1.9 dB max. @ 1625 & 1650 nm
	4x4	1.2 dB max. @ 1310 & 1550 nm 1.6 dB max. @ 1625 & 1650 nm
	4x8	1.2 dB max. @ 1310 & 1550 nm 1.6 dB max. @ 1625 & 1650 nm
	4x12	1.5 dB max. @ 1310 & 1550 nm 1.9 dB max. @ 1625 & 1650 nm
	4x16	1.5 dB max. @ 1310 & 1550 nm 1.9 dB max. @ 1625 & 1650 nm
	8x8	1.2 dB max. @ 1310 & 1550 nm 1.6 dB max. @ 1625 & 1650 nm
	16x16	1.5 dB max. @ 1310 & 1550 nm 1.9 dB max. @ 1625 & 1650 nm
	24x24	2.0 dB max. @ 1310, 1550, 1590 nm
	32x32	2.0 dB max. @ 1310, 1550, 1590 nm
Crosstalk[4,5]		-50 dB max.
Back Reflection[5]		-45 dB max.
Switching Time		40 ms max. for 2x8 to 16x16 50 ms max. for 24x24, 32x32
PDL[5]	2x8, 4x4, 4x8, 8x8	0.15 dB max.
	2x16, 4x12, 4x16, 16x16, 24x24, 32x32	0.3 dB max.
Optical Power		500 mW max.
Operating Temperature		0 to 70 °C
Storage Temperature		-40 to 85 °C
Fiber Type		9/125 um Single Mode
Operating Wavelength Range		1290 - 1650 nm

1. Specifications are without connectors. Add 0.2 dB max. per connector.
2. Insertion Loss for 2x8 to 16x16 is measured at the specified wavelengths, 23 ± 5 °C.
3. Insertion Loss for 24x24 to 32x32 is measured at the specified wavelength, with the wavelength set appropriately with the wavelength set command, 23 ± 5 °C.
4. Power off isolation is the same as crosstalk.
5. Measured at 1550 nm, 23 ± 5 °C.
6. Repeatability is defined after 100 cycles.

ORDERING INFORMATION

MXS - 9100 - ☐ - ☐ - B - ☐

Product Code

MXS-9100

Configuration

2-8	2 inputs and 8 outputs
2-16	2 inputs and 16 outputs
4-4	4 inputs and 4 outputs
4-8	4 inputs and 8 outputs
4-12	4 inputs and 12 outputs
4-16	4 inputs and 16 outputs
8-8	8 inputs and 8 outputs
16-16	16 inputs and 16 outputs
24-24	24 inputs and 24 outputs
32-32	32 inputs and 32 outputs

Fiber Type

B	9/125 um Single Mode

Connector Type

58	FC/APC connectors
89	FC/UPC connectors
104	LC/APC connectors
101	LC/UPC connectors
88	SC/APC connectors
91	SC/UPC connectors

ELECTRICAL SPECIFICATIONS

PARAMETER	RATING
Latching Type	Non-latching
Control Type	Ethernet Interface with EXFO SCPI Command Set
Supply Voltage	AC 100 - 240 V, 50/60 Hz

MECHANICAL SPECIFICATIONS

PARAMETER	RATING
Housing Size, 2x8 to 16x16	Height: 43.65 mm (1U) Width: 483 mm (19") Depth: 342 mm
Housing Size, 24x24 to 32x32	Height: 88.0 mm (2U) Width: 483 mm (19") Depth: 434.5 mm

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