

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 in 2x8, 4x4, 4x8, 4x16, 8x8 and 16x16 configurations
- Protocol and bit rate independent
- Fast switching time < 40 ms
- High reliability with lifetime > 10⁹ 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 SPECIFICATIONS¹

PARAMETER		RATING
Insertion Loss ^{2,3}	2x8	2.2 dB max. @ 1310 nm 1.8 dB max. @ 1550/1625/1650 nm
	4x4	2.1 dB max. @ 1310 nm 1.7 dB max. @ 1550/1625/1650 nm
	4x8	2.3 dB max. @ 1310 nm 2.0 dB max. @ 1550/1625/1650 nm
	4x16	3.6 dB max. @ 1310 nm 3.0 dB max. @ 1550/1625/1650 nm
	8x8	2.5 dB max. @ 1310 nm 2.1 dB max. @ 1550/1625/1650 nm
	16x16	3.6 dB max. @ 1310 nm 3.0 dB max. @ 1550/1625/1650 nm
Crosstalk ⁴	-55 dB max.	
Back Reflection ⁴	-45 dB max.	
Switching Time	40 ms max.	
PDL ⁴	0.15 dB max.	
Repeatability ⁵	0.04 dB max.	
Durability	10 ⁹ cycles min.	
Optical Power	500 mW max.	
Operating Temperature	0 to 70 °C	

- Specifications are without connectors.
- Insertion Loss is measured at the specified wavelengths, 23 ± 5 °C.
- Power off isolation is the same as crosstalk.
- Measured at 1550 nm.
- Repeatability is defined after 100 cycles.

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

ORDERING INFORMATION

MXS - 9100 - x - B -

Product Code

MXS MEMS Matrix Switch

Configuration

2x8	2 Input and 8 output ports
4x4	4 Input and output ports
4x8	4 Input and 8 output ports
4x16	4 Input and 16 output ports
8x8	8 Input and output ports
16x16	16 Input and output ports

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

MECHANICAL DIMENSIONS

(Units: mm)

