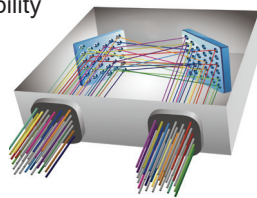




- Proven MEMS technology
- Lifetime > 10^9 switch cycles
- No dithering or active alignment artifacts
- Switches and holds dark fiber connections
- Low insertion loss with excellent stability
- Compact and lightweight
- Asymmetric MxN available



- Headquartered in California since 1986
- US based in-house MEMS fab
- Over 3 million MEMS mirrors produced since 1999
- Manufactures TAA compliant products

SX1 - P - 9 - - T - - N - -

Grade	
P	Performance

Switch Configuration	
16x16	16x16
MxN	M≤16, N≤16

Fiber Type	
9	9/125 μm SMF
<i>*Other fiber options available upon request</i>	

Test Wavelength	
O	1310 nm
E	1410 nm
S	1495 nm
C	1550 nm
L	1590 nm
U	1650 nm
<i>*Use "/" to add multiple wavelengths. E.g., O/C or O/C/L</i>	

Fiber Jacket	
T	900 μm Tight Buffer
<i>*Other fiber options available upon request</i>	

Connector Type	
N	None
FC	FC/UPC
FC/APC	FC/APC
LC	LC/UPC
LC/APC	LC/APC
SC	SC/UPC
SC/APC	SC/APC
<i>*Other connector types available upon request</i>	

Connector Key Orientation	
N	None

Pigtail Length	
1	1 Meter
X	Specify X Meters
<i>*Tolerance is +/- 0.05 m</i>	

MEMS 16X16 OPTICAL MATRIX SWITCH MODULE

SX1 Model, Single Mode Fiber, Performance Grade

OPTICAL SPECIFICATIONS¹

Operating Wavelength	1260 to 1675 nm
Insertion Loss ²	< 0.8 dB
Loss Repeatability ³	+/- 0.01 dB
Connection Stability ⁴	+/- 0.01 dB
Connection Stability (Short Term) ⁵	+/- 0.005 dB
PDL	< 0.1 dB
WDL ⁶	< 0.3 dB
Crosstalk	< -70 dB
Back Reflection	< -50 dB
Optical Transition Time ⁷	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Input Power Range	Dark to +27 dBm

- 1. Measured separately for each Test Wavelength at 23°C
- 2. Measured with 3-jumper method or equivalent. See TIA/EIA 526-7
- 3. Over 100 cycles
- 4. 1 Hz sampling rate for 15 min
- 5. 10 KHz sampling rate for 10 Sec
- 6. Test Wavelength +/-20nm
- 7. Optical transition time for all ports switching concurrently, not including command processing overhead

ELECTRICAL SPECIFICATIONS

Module Power Consumption	3.8 W max. Operating 6.5 W max. Start Up
Supply Voltage	12V DC
Module Interface	16-Pin Samtec
Module Control	USB, RS232, I ² C

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0 to 50°C, < 85% RH
Storage Temperature	-40 to 70°C, < 40% RH

MECHANICAL SPECIFICATIONS

Module Size	142 mm x 88 mm x 22 mm
Module Weight (with fibers)	0.42 kg

