

etMEMS™ 4x4 Fiberoptic Switch

(Protected by U.S. patent 8,203,775 and other patents pending)

Product Description

The etMEMS™ Series 4x4 Fiberoptic switch connects 4 optical channels by redirecting incoming optical signals into 4 selected output fibers. This is achieved using a patent pending etMEMS™ configuration and activated via an electrical control signal. It uniquely features rugged thermal activated micro-mirror and latches to preserve the selected optical path after the drive signal has been removed. This novel design significantly reduces packaging requirement, offering unprecedented high stability as well as an unmatched low cost.

We offer tight-bend-fiber version, which reduces the bending radius. This feature enables smaller overall foot print.

Performance Specifications

etMEMS™ Series 4x4 Switch	Min	Typical	Max	Unit
Operation Wavelength	Single band	1260-1360 or 1510-1610		nm
	Dual band	1260-1360 and 1510-1610		
	Broad bend	1260-1620		
Insertion Loss ^[1]		1.2	2.0 ^[2]	dB
Wavelength Dependent Loss		0.2	0.3 ^[2]	dB
Polarization Dependent Loss			0.15	dB
Return Loss ^[1]	50			dB
Cross Talk ^[1]	50			dB
Repeatability			±0.05	dB
Switching Time		20	25	ms
Durability	10 ⁹			Cycle
Switching Type		Latching		
Operating Temperature	-5		70	°C
Storage Temperature	-40		85	°C
Optical Power Handling ³		300	500	mW
Fiber Type		SMF-28 ^[3]		

[1]. Excluding connectors.

[2]. Dual band and Broad band.

[3]. Please contact us for difference fiber type.

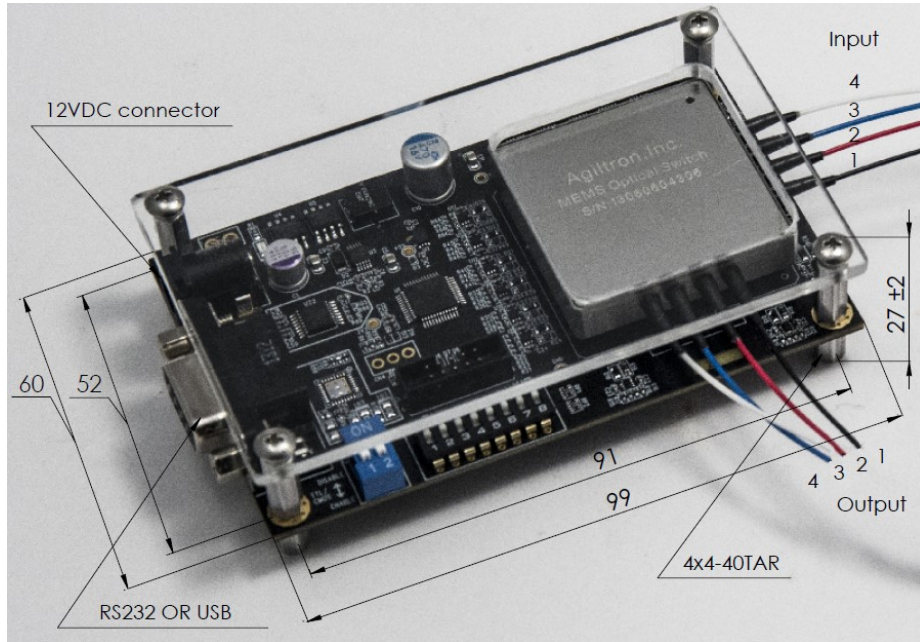
Applications

- Channel Blocking
- Configurable Add/Drop
- System Monitoring
- Instrumentation

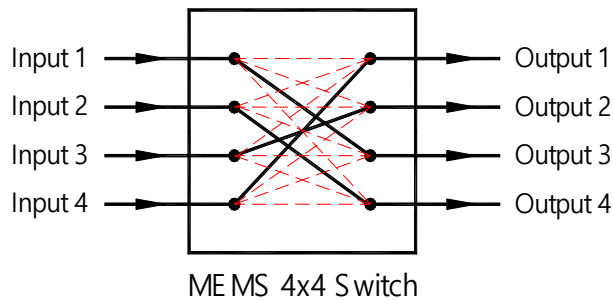


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Mechanical Dimensions (Unit: mm)



Functional Diagram



Ordering Information

MEMS-	Type	Wavelength	Switch	Package	Fiber Type	Fiber Length	Connector
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2x4=24 3x4=34 4x4=44 Special=00	C+L=2 1310=3 1550=5 780=7 850=8 1310 & 1550=9 1260-1620=B Special=0	1 Latching Type=1	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
	Standard=2 Special=0			SMF-28=1 Special=0	Bare fiber=1 900um tube=3 Special=0	0.25m=1 0.5m=2 1.0m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Duplex LC=8 Special=0

