

# etMEMS™ 8x8 or 16x16 Fiberoptic Switch Module (Preliminary)

(Protected by U.S. patent 13/210,703 and pending patents)

## Product Description

The etMEMS™ Series 8x8 or 16x16 Fiberoptic switch module connects optical channels by redirecting incoming optical signals into selected output fibers. It is entirely non-blocking. This is achieved using a patent pending MEMS configuration and activated via an electrical control signal. It uniquely features rugged thermal activated micro-mirrors, and the intrinsic tolerance to ESD. This novel design significantly reduces packaging requirement, offering unprecedented high stability as well as an unmatched low cost.

The control interface of this switch module is either RS232 or USB or RJ45 for the remote control. The Window GUI is provided to set up the switching configuration. The out power source is needed with 120V/240V AC.

For more information, please call us.

## Performance Specifications

MEMS 8x8 or 16x16	Min	Typical	Max	Unit
Operation Wavelength	Single Band: 1260-1360 or 1510-1610 Dual Band: 1260-1360 and 1510-1610 Broadband: 1260~1620			nm
Insertion Loss <sup>[1]</sup>		1.8	3.2	dB
Wavelength Dependent Loss		0.2	0.3 <sup>[2]</sup>	dB
Polarization Dependent Loss			0.2	dB
Return Loss <sup>[1]</sup>	50			dB
Cross Talk	50			dB
Repeatability			±0.05	dB
Durability	10 <sup>9</sup>			Cycle
Switching Type	Non-Latching			
Operating Temperature	-5		70	°C
Storage Temperature	-40		85	°C
Optical Power Handling		300		mW
Fiber Type	SMF-28			
Package Dimension	See package design			

[1]. Excluding connectors.

[2]. Dual band and Broad band.

## Features

- Non-blocking
- Intrinsic tolerance to ESD
- High Reliability
- Epoxy-Free Optical Path

## Applications

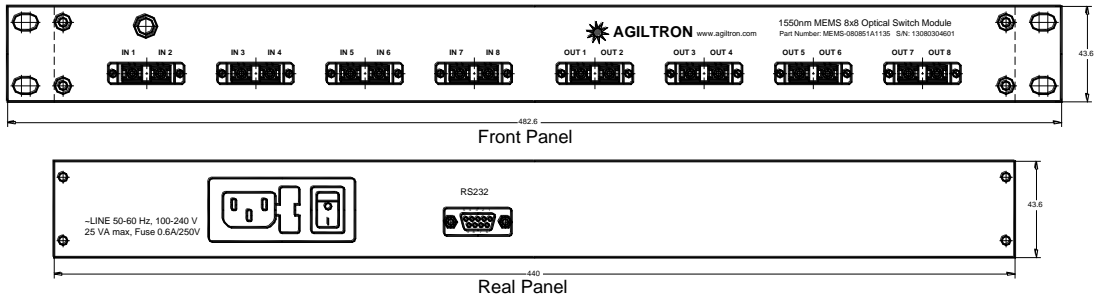
- Crossing connection
- Configurable Add/Drop
- System Monitoring
- Instrumentation



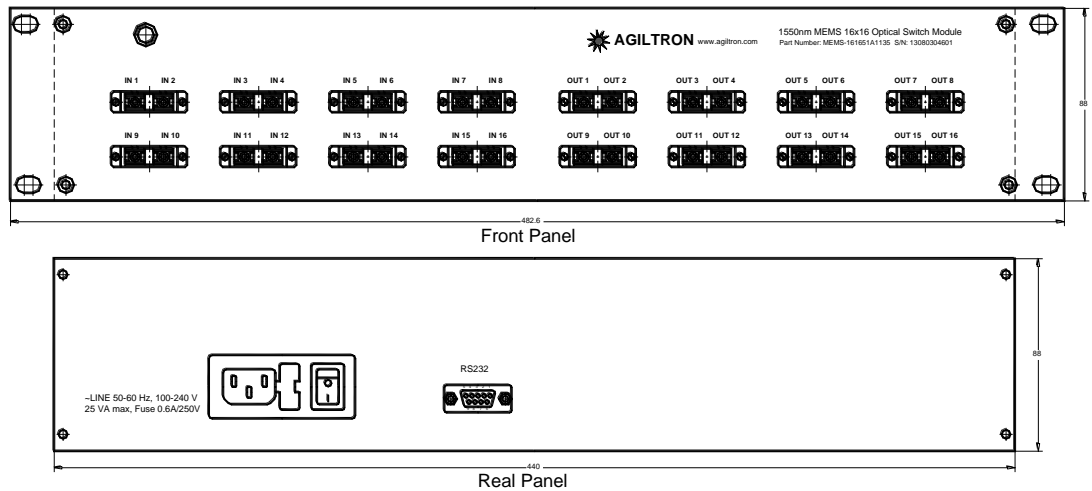
# MEMSLatch™ 8x8 or 16x16 Fiberoptic Switch Module

## Mechanical Dimensions (Unit: mm)

### MEMS 8x8 Optical Switch Module



### MEMS 16x16 Optical Switch Module



## 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"/>	8x8=0808 16x16=1616	1060=1 C+L=2 1310=3 1410=4 1550=5 850=8 1310 & 1550=9 1260/1620=B Special=0	Non-Latching=2 Special=0	1U/19"=1 2U/19"=2 Special=0	SMF-28=1 Special=0	Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Duplex LC=8 MTP=9 Special=0

