MEMS 48x48 Fiber Optical Switch

(Non-Blocking, Bidirectional)

(Protected by U.S. patents 7224860，6757101，6577430 and pending patents)

Product Description

The Agiltron MEMS 48x48 optical fiber switch is a leading solution to manage and monitor large optical networks intelligently and remotely, establishing optical signal paths in milliseconds. The switch system is supported by a robust software and control algorithms making the management of live traffic resilient to the effects of time, vibration and temperature. Their unique capabilities enable the dynamic selection and distribution of optical signals for analysis and storage. The passive switch is bit rate independent, supporting all date rates.

Monitoring Applications - access signals for analysis in real time without disrupting traffic.

Reconfigure Applications – select, duplicate, and distribute optical signals to one or many locations.

Features

- Low Cost
- High Reliability
- Low Insertion Loss
- Broad Band
- Compact Design
- Low Voltage

Applications

- Optical Signal Routing
- Network Protection
- Wavelength Management
- Signal Monitoring
- Instrumentation

Performance Specifications

MEMS 48x48 Switch	Min	Typical	Max	Unit
Operation Wavelength		1260~1650		nm
Insertion Loss[1]	0.5	1.5	2	dB
Cross Talk	50			dB
Switch Speed (Rise, Fall)			20	ms
Durability	10^8			cycle
Polarization Dependent Loss		0.04	0.2	dB
Wavelength Dependence Loss[2]		0.1	0.3	dB
Return Loss	45			dB
Repeatability		0.3	0.5	dB
Operating Temperature [3]	-5		65	°C
Optical Power Handling [4]		300	500	mW
Storage Temperature	-40		85	°C
Electrical Power Consumption			80	W
Switch type		Non-Latching/Latching		
Package Dimension		2RU		

1. Measured without connectors
2. Within 50nm bandwidth
3. -25 °C~75°C version is also available.
4. High power version available

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Revision: 08-27-18

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Switching Module Mechanical Dimensions

The switch module is mounted inside a standard rack box with front fiberoptic connectors of customer choice and back electrical power input and control interfaces. The height of the box is determined by the port count.

Electrical Specification

- RS 232/ RS 485
- Ethernet 10/100 with definable IP address
- CLI
- GUI
- Dual 48V/120-220V Power Input
- USB
- SNMPv3

Graphic Interface

Per customer request

Ordering Information

MEMS-	☐☐☐	☐	☐	☐	☐	☐	☐
	Type	Wavelength	Switch Type	Package	Fiber Type	Power Monitor	Connector
	8x8=008 12x12=112 16x16=016 24x24=024 32x32=032 48x48=048 64x64=064 128x128=128 144x144=144 192x192=192 256x256=256 Special=000	1060=1 1310=3 1410=4 1550=5 1310/1550=2 650=6 780=7 850=8 Special=0	Symmetric=1 Special=0	Standard=1 Special=0	SMF-28 =1 MM 50/125=2 MM 62.5/125=3 Panda=5 Special=0	Input=1 Output=2 Input/output=3 None =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

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