SelfAlign™ Dual 1xN Fiber Optic Switch Module
(*all fiber type, all wavelength, bidirectional*)

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

Features

- Low Cost
- High Reliability
- Low Insertion Loss
- Broad Band
- Compact Design
- Low Power Switching

Applications

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

Product Description

The SelfAlign series Dual 1xN Broadband Fiber Optical Switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved by using a patent pending opto-mechanical configuration activated via an electrical control signal. Latching operation preserves the selected optical path after the drive signal has been removed. Agiltron unique design offers low insertion loss covering a very broad spectral band from 200 to 2000 nm with various single mode and multimode fibers.

Multimode fiber core size is from 50 to 1000 μm. The switch is bidirectional and can accommodate up to 300 fiber ports. The switch is controlled by RS232 or USB computer interface with a graphic Software. Labview version is also available.

Performance Specifications

SelfAlign dual 1xN Switch		Min	Typical	Max	Unit
Operation Wavelength	UV-VIS	200		2000	nm
	MWIR	1000		5000	
	LWIR	7000		12000	
Insertion Loss [1]			0.6	2	dB
Wavelength Dependence Loss			0.15	0.3	dB
Polarization Dependent Loss			0.05	0.1	dB
Cross Talk		50			dB
Return Loss	APC	50			dB
	UPC	40			
Switch Time				200	ms
Switch type			Latching		
Durability		10^7			cycle
Optical Power Handling			300	500 [2]	mW
Operating Temperature		-5		65	°C
Storage Temperature		-40		85	°C
Fiber Type	Single Mode	Corning SMF-28 or equivalent			
	Multimode	50		1000	μm
Power Supply			100~240		VAC
Package Type			2U 19" Mount Rack		

[1]. Measured without connectors.
[2]. High power version is available.

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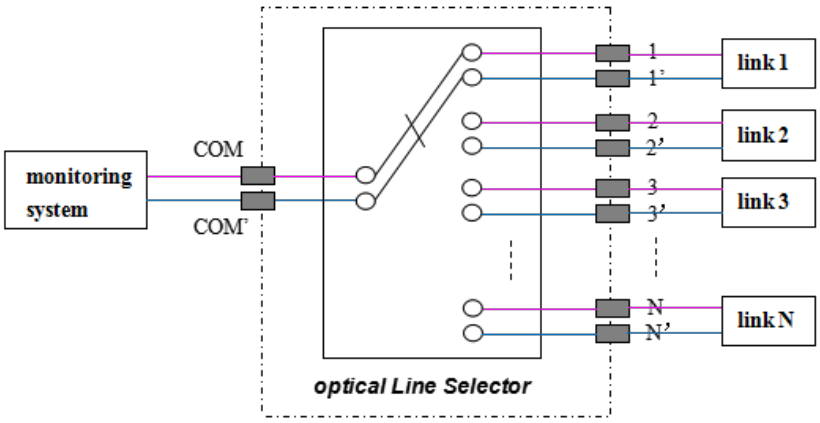
Dual Channel Optical Configuration

Two fiber channels are grouped to switch simultaneously. This is a cost effective configuration than using two 1xN switches.



Module Mechanical Dimensions

2RU 19" mount rack typically. The input and output connectors are on the front panel, while the control interface and power supplier are on the rear panel.

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Control Interface and Power Supply

- RS 232
- Ethernet 10/100 with definable IP address
- USB
- GUI
- 120-220V (0.6 A) Power Input

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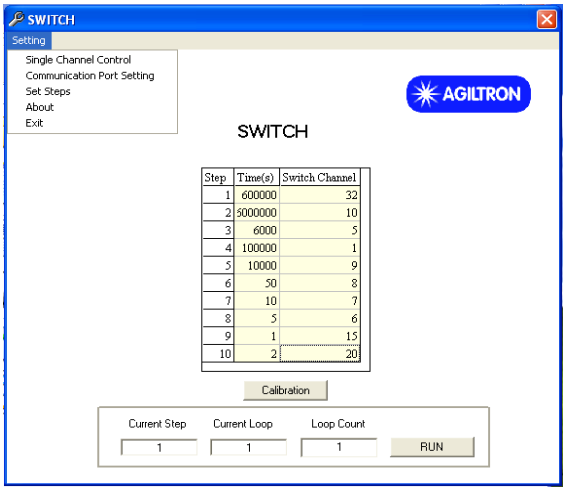
Typical Graphic User Interface



Ordering Information

LBSCD-	☐☐☐	☐	x	☐	☐	☐	☐
	Type	**Wavelength**	**Switch Type**	**Package**	**Fiber Type**		**Connector**
	1x8=008 1x16=016 1x32=032 1x64=064 1x128=128 1x256=256 Special=000	1060nm=1 1310nm=3 1410nm=4 1550nm=5 1310/1550nm=2 650nm=6 780nm=7 850nm=8 Special=0		Standard 2RU =1 Special=0	SMF-28 =1 MM 50/125=2 MM 62.5/125=3 PM 405 = 4 PM 350 = 5 PM 780 = 7 Special=0	Bare fiber=1 loose tube=2 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Duplex LC=8 Quad LC=9 Special=0

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