

# SelfAlign™ Series of 1xN Fiber Optic Switch Module (bidirectional)

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

## Product Description

The SelfAlign Series 1xN Series optical fiber switch is based on patent pending self-groove alignment mechanism without the need for AR coating and lenses. It offers unparalleled advantages of very low loss and cost, amicable to any fiber core size, and broad wavelength operation from 300nm-2300nm. The 1xN series optical fiber switch is compliant with the Telcordia 1209 and 1221 reliability standards. The driving circuit is embedded in the package and is connected to computer through RS232, USB or RJ45 interface.

The SelfAlign 1xN optical fiber switch is suitable for multiple channel signal monitoring and signal management. The switch is bidirectional. It is not designed to maintain optical connections after electrical power is removed.



## Features

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

## Performance Specifications

SelfAlign 1xN Switch	Min	Typical	Max	Unit
Operation Wavelength	400		1800	nm
Insertion Loss <sup>[1]</sup>		0.6	1.5	dB
Cross Talk	50			dB
Switch Speed (Rise, Fall) <sup>[2]</sup>		100		ms
Durability	10 <sup>7</sup>			cycle
Polarization Dependent Loss		0.02	0.1	dB
Wavelength Dependence Loss		0.1	0.2	dB
Return Loss <sup>[5]</sup>	45			dB
Repeatability			0.3	dB
Power Consumption <sup>[3]</sup>	0.7	3.6	5	W
Operating Temperature <sup>[4]</sup>	-5		65	°C
Optical Power Handling <sup>[6]</sup>		300	500 <sup>[6]</sup>	mW
Storage Temperature	-40		85	°C
Power supply		100 ~240		VAC
Fiber Type		SMF-28 or 50/125um or 62.5/125um		
Package Dimension		2RU 19" Mount rack or similar		

[1]. Measured without connectors

[2]. Switching between adjacent channels

[3]. Consume minimum power during sleep time

[4]. -25 °C~75°C version is also available.

[5]. For SM. Larger core will reduce the value, index matching-fluid version increases the return loss

[6]. High power version available

## Applications

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

