

# SelfAlign™ Series of NxN Fiberoptic Switches

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

## Product Description

The SelfAlign Series of optical fiber switch is based on a patent pending self-groove alignment mechanism without the need for AR coating and lenses. It offers unparalleled advantages of very low loss of about 1dB for any array size, and low cost, amicable to any fiber core size, and broad wavelength operation from 300nm-2300nm. The SelfAlign Series of optical fiber switch is compliant with the Telcordia 1209 and 1221 reliability standards. The driving circuit is embedded in the package and is connected through RS232, RS485, or RJ45 interface.

The SelfAlign optical fiber switch is suitable for multiple channel signal monitoring and wavelength management in NxN, MxN and NxM configurations.



## Performance Specifications

SelfAlign™ Series Switch	Min	Typical	Max	Unit
Operation Wavelength	400	1260-1650	1800	nm
Insertion Loss <sup>1</sup>	0.7	1	2.0	dB
Cross Talk	70			dB
Switch Speed (Rise, Fall)			1000	ms
Durability	10 <sup>7</sup>			cycle
Polarization Dependent Loss		0.04	0.2	dB
Wavelength Dependence Loss <sup>2</sup>		0.1	0.3	dB
Return Loss	45			dB
Repeatability		0.1	0.3	dB
Operation Voltage <sup>3</sup>			12	V
Operating Temperature <sup>4</sup>	-5		65	°C
Optical Power Handling <sup>5</sup>		300	500 <sup>5</sup>	mW
Storage Temperature	-40		85	°C
Switch type	Non-Latching/Latching			
Package Dimension	Connector dependent W/LC=2RU/96 Ports			

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

## 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

# LightBend™ NxN Fiber Optic Switch

## Switching Module Mechanical Dimensions

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

## Electrical Specification

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

## Graphic Interface

Per customer request

## Ordering Information

LBMS-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Switch Type	Package	Fiber Type		Input Monitor	Connector
	32 x32=064 64x64= 128 80x80= 160 96x96= 192 128x128=256 192x192=384 250 x 250=500 Special=000	1060=1 1310=3 1410=4 1550=5 1310/1550=2 650=6 780=7 850=8 Special=0	Symmetric =5 Special=0	Standard=2 Special=0	SMF-28 =1 MM 50/125=2 MM 62.5/125=3 Special=0	Bare fiber=1 loose tube=3 Special=0	Yes =1 No =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