

# LightBend™ 1xN Fiberoptic Switch (Bidirectional)

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

## Product Description

The 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, RS485, or RJ45 interface.

The 1xN optical fiber switch is suitable for multiple channel signal monitoring and signal management. The switch is bidirectional.



## Performance Specifications

LB Series 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)			1000	ms
Durability	10 <sup>7</sup>			cycle
Polarization Dependent Loss		0.02	0.2	dB
Wavelength Dependence Loss <sup>2</sup>		0.1	0.3	dB
Return Loss	45			dB
Repeatability			0.3	dB
Input Power			5	W
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			
Fiber Type	Corning SMF28			
Package Dimension	160L x 108W x 73H			mm

1. Measured without connectors
2. Within 50nm bandwidth
3. Other voltage requirements 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 Motor Drive

## Applications

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

# LightBend™ 1xN Fiber Optic Switch

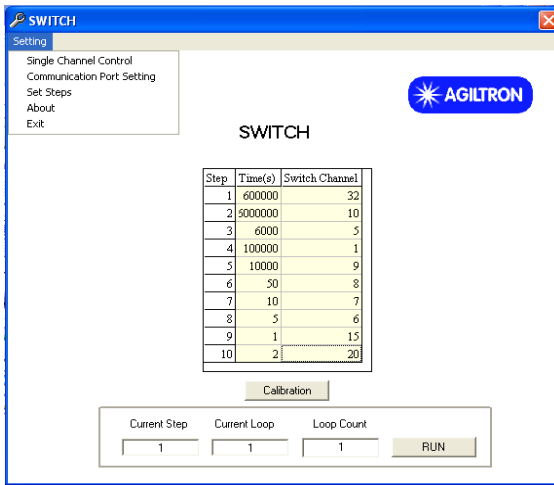
## Switching Module Mechanical Dimensions

The switch module provides 4 mounting screw positions on the bottom, with input and output fiber on same side.

## Electrical Specification

- RS 232/ RS 485
- Ethernet 10/100 with definable IP address
- CLI
- GUI
- 48V/120-220V (0.6 A) Power Input
- USB

## Graphic Interface



## Ordering Information

LBSC-	Type	Wavelength	Switch Type	Package	Fiber Type	Fiber Length	Connector	
□ □ □ □ □ □ □ □ □ □	1x8=08 1x16=16 1x32=32 1x64=64 1x128=128 Special=00	1060=1 1310=3 1410=4 1550=5 1310/1550=2 650=6 780=7 850=8 Special=0	1	Standard=2 Special=0	SMF-28 =1 MM 50/125=2 MM 62.5/125=3 Special=0	Bare fiber=1 900µm loose tube=3 Special=0	0.25m=1 0.5m=2 1.0m=3 Special=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