

LightBend™ NxN Fiberoptic Switch (Bidirectional)

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

Product Description

The NxN Series 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 NxN 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 switch is bidirectional.

The NxN optical fiber switch is suitable for multiple channel signal monitoring and wavelength management.



Performance Specifications

LB Series NxN Switch	Min	Typical	Max	Unit
Operation Wavelength	400	1260-1650	1800	nm
Insertion Loss ¹	0.7	1	3.0	dB
Cross Talk	50			dB
Switch Speed (Rise, Fall)			1000	ms
Durability	10 ⁷			cycle
Polarization Dependent Loss		0.04	0.2	dB
Wavelength Dependence Loss ²		0.1	0.3	dB
Return Loss	45			dB
Repeatability		0.1	0.3	dB
Operation Voltage ³			12	V
Operating Temperature ⁴	-5		65	°C
Optical Power Handling ⁵		300	500 ⁶	mW
Storage Temperature	-40		85	°C
Switch type	Non-Latching/Latching			
Package Dimension	4RU for 192 ports, 8RU for 384 ports, ...			

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

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 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
- 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	Bare fiber=1 Loose tube=2 Special=0	Power Monitor	Connector	
32x32=064	1060=1	Symmetric=1	Standard=1	SMF-28 =1		Input=1	None=1	
48x48=096	1310=3	Special=0	Special=0	MM 50/125=2		Output=3	FC/PC=2	
64x64=128	1410=4			MM 62.5/125=3		Input/output=2	FC/APC=3	
80x80=160	1550=5			Special=0		None =0	SC/PC=4	
96x96=192	1310/1550=2						SC/APC=5	
128x128=256	650=6						ST/PC=6	
144x144=288	780=7						LC=7	
192x192=384	850=8						Duplex LC=8	
250x250=500	Special=0						Special=0	
Special=000								