

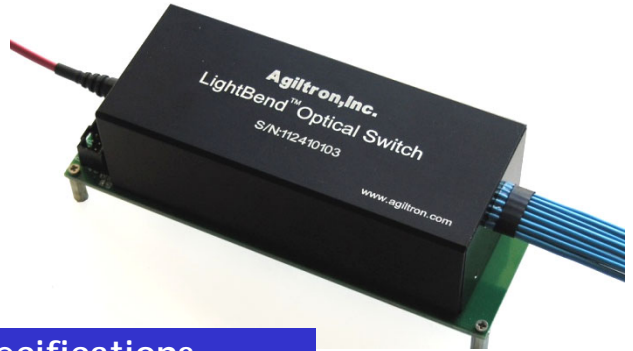
# LightBend™ 1xN Broadband Fiberoptic Switch

(Protected by U.S. patent 6823102 and pending patents)

## Product Description

The LB Series 1xN Multimode Broadband Fiberoptic 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 230 to 2000 nm with various fiber core size from 50 to 400  $\mu\text{m}$ . MWIR and LWIR versions are also available.

The switch is ideal for sensor and spectroscopy applications. The switch is controlled by RS232 or USB computer interface with a graphic software.



## Performance Specifications

LB Series 1xN MM Switch		Min	Typical	Max	Unit
Operation Wavelength	UV-VIS	230		2000	nm
	MWIR	10000		50000	
	LWIR	70000		12000	
Insertion Loss <sup>1</sup>			0.6	2	dB
Wavelength Dependent Loss			0.15	0.3	dB
Polarization Dependent Loss			0.05	0.10	dB
Return Loss (APC/UPC)		50/40			dB
Cross Talk		60			dB
Operating Voltage			24		VDC
Switching Type			Latching		
Operating Temperature		0		70	°C
Optical Power Handling			300	500 <sup>2</sup>	mW
Storage Temperature		-40		85	°C
Fiber Type		50		400	$\mu\text{m}$
Package Dimension		L147.0 x W54.0 x H 48.0			mm

Note:

1. Exclude connectors.
2. High power version available.

## Features

- Unmatched Low Cost
- Very Broad Spectral Range
- High Isolation
- High Reliability
- Epoxy-Free Optical Path

## Applications

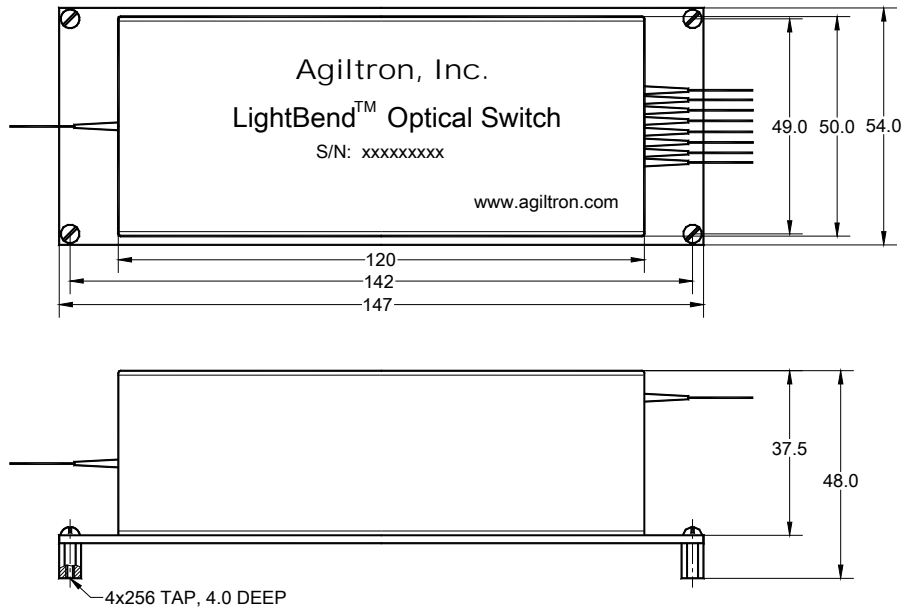
- Sensor
- Spectroscopy
- High Power Laser
- Instrumentation

# LightBend™ 1xN Broadband OptoMechanical Fiberoptic Switch

## Electrical Driving Requirement

Agiltron offers a computer control kit with TTL and RS232 interfaces and Windows™ GUI

## Mechanical Dimensions (Unit: mm)



## Ordering Information

LBBB-	<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	Package	Fiber Type	Fiber Length	Connector			
1x8=18 1x16=16 1x24=24 1x30=30 1x50=50 Special=00	UV-VIS=1 MWIR =5 LWIR =8	Latching=1 Special=0	Standard=1 Special=0	MM50/125=5 MM62.5/125=6 100 =1 200 =2 300 =3 400=4 Special=0	Bare fiber=1 900um 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 SMA905=9 Special= 0		