

LightBend™ 1xN Fiber Optic Switch

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

Product Description

The 1xN Series optical fiber switch is based on precise groove alignment mechanism featuring low cost, compact design, simple construction, easy drive, and excellent optical performance for any wavelength between 400nm-1800nm. 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 wavelength management.



Performance Specifications

LB Series 1xN Switch	Min	Typical	Max	Unit
Operation Wavelength	400		1800	nm
Insertion Loss ¹		0.6	1.5	dB
Cross Talk	50			dB
Switch Speed (Rise, Fall)			1000	ms
Durability	10 ⁷			cycle
Polarization Dependent Loss		0.02	0.2	dB
Wavelength Dependence Loss ²		0.1	0.3	dB
Return Loss	45			dB
Repeatability			0.3	dB
Input Power			5	W
Operation Voltage ³			12	V
Operating Temperature ⁴	-5		65	°C
Optical Power Handling ⁵		300	500 ^o	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

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1xN Optical Switch Electrical Specification

Parameters	Min	Nom	Max	Unit	Notes
Power Supply Voltage		12	13		* DC/1.5-2A with inner tip positive
Switching Rated Current	100		200	mA	

1xN Optical Switch Graphic Interface

The screenshot shows a software window titled "SWITCH" with a menu on the left and a main display area. The menu includes: Single Channel Control, Communication Port Setting, Set Steps, About, and Exit. The main display area features the AGILTRON logo, the title "SWITCH", and a table with the following data:

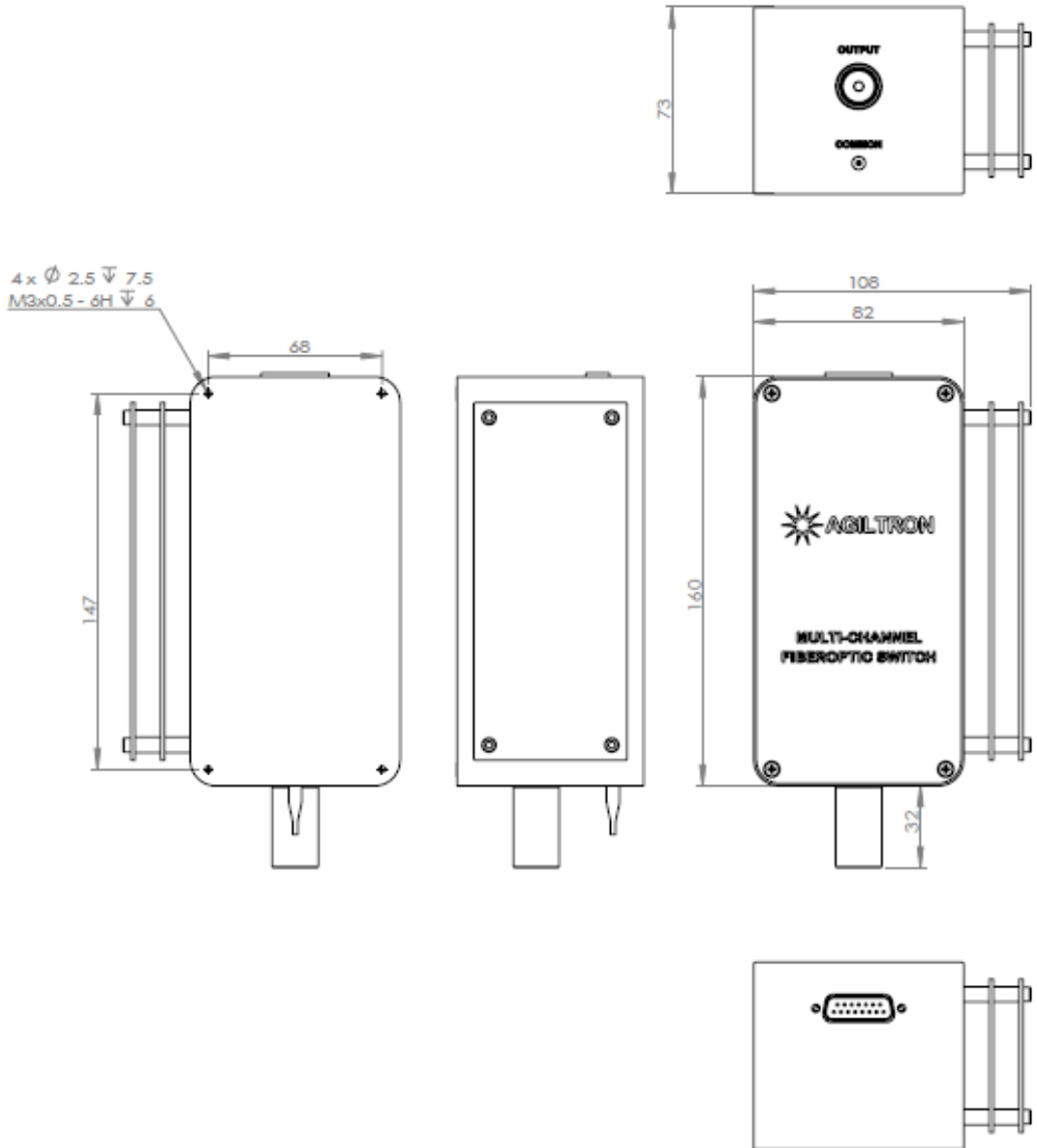
Step	Time(s)	Switch Channel
1	600000	32
2	5000000	10
3	6000	5
4	100000	1
5	10000	9
6	50	8
7	10	7
8	5	6
9	1	15
10	2	20

Below the table is a "Calibration" button. At the bottom, there are three input fields: "Current Step" (value: 1), "Current Loop" (value: 1), and "Loop Count" (value: 1), followed by a "RUN" button.

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Mechanical Foot print Dimensions (mm)



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Ordering Information

LBMS-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	Switch Type	Package	Fiber Type	Fiber Length	Connector			
1x8=08	1060=1		Standard=2	SMF-28 =1	Bare fiber=1	0.25m=1	None=1		
1x16=16	1310=3		Special=0	MM	900µm loose tube=3	0.5m=2	FC/PC=2		
1x32=32	1410=4			50/125=2	Special=0	1.0m=3	FC/APC=3		
1x64=64	1550=5			MM		Special=0	SC/PC=4		
1x128=1	1310/1550=2			62.5/125=			SC/APC=5		
28	650=6			3			ST/PC=6		
Special=	780=7			Special=0			LC=7		
00	850=8						Duplex LC=8		
	Special=0						Special=0		