

FTBx-9160 MEMS Optical Switch



EXFO | MULTILINK

SPEC SHEET

Provides highly accurate and repeatable fiber-to-fiber switching.

KEY FEATURES

Singlemode 1 x N up to 1 x 32

Fast switching time of ≤ 30 ms

Lifetime expectancy of more than 1×10^9 cycles

Variety of connector options

COMPATIBLE PRODUCTS AND ACCESSORIES



Rackmount Platform
LTB-8



Variable Attenuator
FTBx-3500

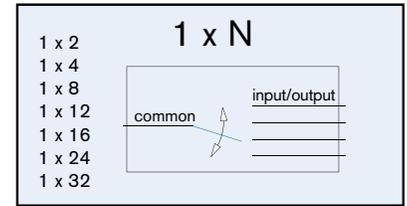


Multi-User Interface
EXFO Multilink

EXFO

MEMS-BASED DESIGN

With its MEMS-based design, EXFO's FTBx-9160 delivers durable performance in a compact package. Fast switching time and a 1-billion-cycle lifetime expectancy make it the perfect optical switch for demanding manufacturing applications. The FTBx-9160 MEMS Optical Switch is available for singlemode fibers with a choice of 1 x 2, 1 x 4, 1 x 8, 1 x 12, 1 x 16, 1 x 24 and 1 x 32 modules.

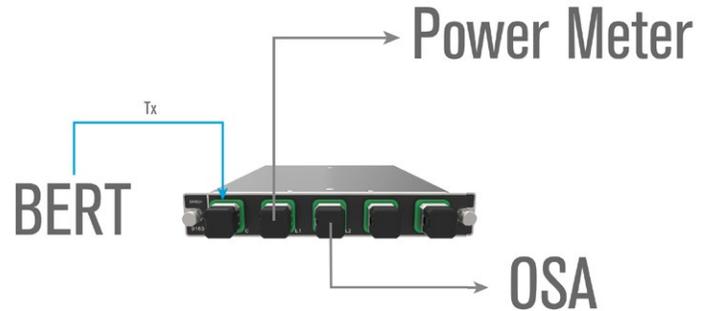


The 1 x N configurations provide precise optical switching between one common port and N input/output ports—perfect for multiple-component or ribbon-fiber testing.

SUPPORTING VARIOUS APPLICATIONS

Optical switches are basic components integrated in almost every test station. The FTBx-9160 offers the specifications and features to support a wide variety of applications. Choose it to:

- › Analyze transmitted signals using several types of test instruments, such as an optical spectrum analyzer and a bit-error-rate tester
- › Reconfigure an R&D or manufacturing test station to allow testing of several types of devices
- › Test multiple devices under test (DUTs) in parallel



LTB-8 PLATFORM

The LTB-8 is a highly scalable and compact platform featuring the industry's best 100G port density and hot-swap capabilities for no downtime or interruption in tests, and greatly improved efficiency.

The FTBx-9160 can be easily remote-controlled by means of the standard LAN or optimal GPIB interface using SPCI commands, IVI drivers or any other automation software.



SPECIFICATIONS ^a					
Switch	1 x 2, 1 x 4	1 x 8	1 x 12	1 x 16	1 x 24, 1 x 32
Operating wavelength (nm)	1290 to 1650				
Insertion loss (dB) at 1310 nm ^{b, c}	0.9	1.2	1.6	1.8	2.0
Insertion loss (dB) at 1530 nm to 1650 nm ^{b, c}	0.7	1.0	1.2	1.4	1.5
Repeatability (dB) ^d	0.02				
Backreflection (dB) (typical)	-50 (-55)				
Crosstalk (dB) (typical)	50 (60)				
Polarization-dependent loss (dB) (typical) ^e	0.09 (0.06)			0.11 (0.08)	
Switching time (ms) ^c	20	30			
Fiber type	Singlemode 9/125 μ m				
Input power (damage threshold) (dBm)	27				

GENERAL SPECIFICATIONS					
Switch	1 x 2, 1 x 4	1 x 8	1 x 12	1 x 16, 1 x 24	1 x 32
Number of slots	1	2	3	4	4
Dimensions height	25 mm (1 in)	50 mm (2 in)	75 mm (3 in)	100 mm (4 in)	100 mm (4 in)
width	159 mm (6 1/4 in)	159 mm (6 1/4 in)	159 mm (6 1/4 in)	159 mm (6 1/4 in)	159 mm (6 1/4 in)
depth	185 mm (7 5/16 in)	185 mm (7 5/16 in)	185 mm (7 5/16 in)	185 mm (7 5/16 in)	185 mm (7 5/16 in)
Switch life	1 billion (10 ⁹) cycles minimum				
Temperature operating	0 °C to 40 °C (32 °F to 104 °F)				
storage	-40 °C to 70 °C (-40 °F to 158 °F)				
Maximum relative humidity	80 % non-condensing at 40 °C				
Instrument Drivers IVI drivers and SCPI commands.					
Remote Control With LTB-8 and Ethernet.					
Standard Accessories User guide, certificate of compliance and calibration certificate.					

Notes

- Specifications valid at 23 °C \pm 5 °C.
- Insertion losses per module, including one connector.
- Typical specifications.
- Repeatability values are for 100 cycles per switch module at constant temperature with stabilized source/meter.
- At 1550 nm.

ORDERING INFORMATION

FTBx-9160-01-XX-B-XX

Channel configuration ^a

02 = 2 channels
 04 = 4 channels
 08 = 8 channels
 12 = 12 channels
 16 = 16 channels
 24 = 24 channels
 32 = 32 channels

Connector

58 = FC/APC narrow key
 88 = SC/APC
 89 = FC/UPC
 91 = SC/UPC
 101 = LC/UPC ^c
 104 = LC/APC ^c
 EI-EUI-89 = UPC/FC narrow key ^b
 EI-EUI-90 = UPC/ST ^b
 EI-EUI-91 = UPC/SC ^b
 EI-EUI-98 = UPC/LC ^b
 EA-EUI-89 = APC/FC narrow key ^b
 EA-EUI-91 = APC/SC ^b
 EA-EUI-98 = APC/LC ^b

Example: FTBx-9160-01-04-B-EI-EUI-98

Notes

- For 2 x N and multimode configurations, please refer to the FTBx-9150 ordering information.
- Not available for 1 x 32 switches.
- Available for 1 x 32 switches only.

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