

LTBe-9110 MEMS optical switch



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

SPEC SHEET

KEY FEATURES

Array of, 1 x 4 and 1 x 8 to optimize port density

Fast switching time of ≤ 30 ms

Lifetime expectancy of more than 1×10^9 cycles

Very compact 1/2U rackmount

RELATED PRODUCTS AND ACCESSORIES



Rackmount platform
LTB-8



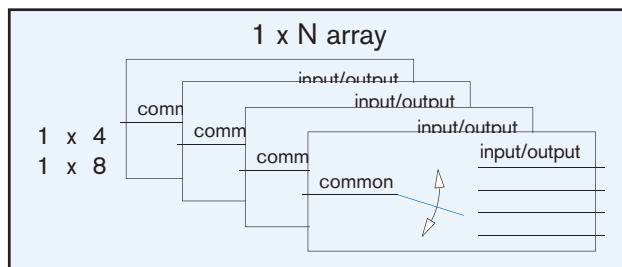
Rackmount platform
LTB-2



Optical light source
FTBx-2150

MEMS-BASED DESIGN

With its MEMS-based design, EXFO's LTBe-9110 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 LTBe-9110 MEMS optical switch is available for singlemode fibers with a choice of 1 x 4 (array of 4) and 1 x 8 (array of 4). Other port count and configurations may be available upon request.

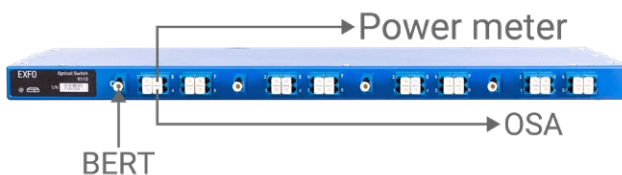


The 1 x N configurations provide precise optical switching between one common port and N input/output ports—perfect for multiple-component or ribbon-fiber testing. Array configurations are a repetition of this pattern.

SUPPORTING VARIOUS APPLICATIONS

Optical switches are basic components integrated in almost every test station. The LTBe-9110 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 PLATFORMS

LTBe-9110 product is designed to operate with LTB-2, LTB-8 or LTB-12 platforms. Simply link the LTBe-9110 on USB port and it is automatically recognized by ToolBox system. The LTB platforms are a highly scalable and feature hot-swap capabilities for no downtime or interruption in tests, and greatly improved efficiency.

The LTBe-9110 can be easily remote-controlled by means of the standard LAN or optimal GPIB interface using SCPI commands, IVI drivers or any other automation software.



SPECIFICATIONS^a

Switch	1 x 4	1 x 8
Operating wavelength (nm)		1260 to 1650
Insertion loss (dB) (typical) ^b	1.45 (0.9)	1.75 (1.2)
Repeatability (dB) ^c		±0.02 or 0.04
Backreflection (dB) ^d		-50
Crosstalk (dB) (typical)		50 (60)
Polarization-dependent loss (dB) ^{d,e}		0.15
Switching time (ms) ^d		<30
Fiber type		Singlemode 9/125 μm
Input power (damage threshold) (dBm)		27

GENERAL SPECIFICATIONS

Switch	1 x 4, 1 x 8
Size (H x W x D)	22 mm x 440 mm x 203 mm (14/16 in x 17 5/16 in x 8 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
Operation	LTBe-9110 must be connected to an EXFO platform using the USB cable provided. Supported platforms: LTB-2, LTB-8 and LTB-12.
Instrument drivers	IVI drivers, SCPI commands and REST API.
Remote control	Via platform automation services.
Standard accessories	USB cable, user guide ^f , rackmount bracket and test report.

a. Specifications valid at 23 °C ± 2 °C.

b. Insertion loss per module, including one connector.

c. Repeatability values are for 100 cycles per switch module at constant temperature with stabilized source/meter.

d. Typical specifications.

e. At 1550 nm.

f. Available online only.

ORDERING INFORMATION

LTBe-911X-01-XX-B-XX

Array configuration

4 = Four 1 x N switches side by side

Channel configuration^a04 = 4 channels^b08 = 8 channels^b**Connector**

101 = LC/UPC

104 = LC/APC

Other port counts and configurations may be available upon request. Please call factory.

Example: LTBe-9114-01-04-B-101

a. For 2 x N and multimode configurations, please refer to the FTBx-9150 ordering information.

b. Available for 4 array configurations.

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