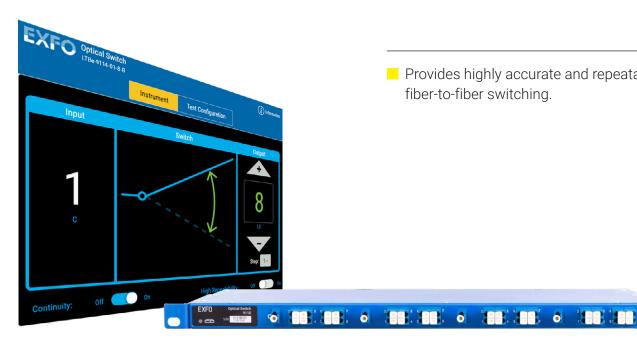
# LTBe-9110

# MEMS OPTICAL SWITCH



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

### **KEY FEATURES**

Arrays of 1×4 and 1×8 to optimize port density

Fast switching time of < 30 ms

Product lifespan of more than 1×109 cycles

Very compact ½U rackmount

## RELATED PRODUCTS AND ACCESSORIES



Rackmount platform LTB-12



Platform FTB-4 Pro



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 product lifespan 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 1×4 (array of 4) and 1×8 (array of 8). Other port count and configurations may be available upon request.

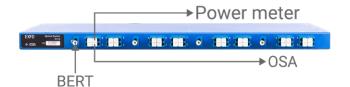
# 1×N array input/output comm comm input/output comm common input/output

The 1×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 repeat 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



#### LABORATORY AND FIELD PLATFORMS

LTBe-9110 product is designed to be used with LTB-2, LTB-8, LTB-12, FTB-4 Pro or LTK-1 platforms. Simply connect the LTBe-9110 to the USB port and it is automatically recognized by the ToolBox system. EXFO platforms are highly scalable and (except FTB-4 Pro and LTK-1) feature hot-swap capabilities for no downtime or interruption in tests, and greatly improved efficiency.

The LTBe-9110 can easily be remote-controlled when connected to the LTB or FTB platforms. Automation is possible by means of the standard LAN or GPIB interface using SCPI commands, IVI drivers or any other automation software.











SPECIFICATIONS <sup>a</sup>		
Switch	1×4	1×8
Insertion loss (dB) b, c, d	0.9	1.2
Operating wavelength (nm)	1240 to 1680	
Repeatability (dB) e	±0.02	
Backreflection (dB) °	-50	
Crosstalk (dB) (typical)	50 (60)	
Polarization-dependent loss (dB) c, f	0.15	
Switching time (ms)°	< 30	
Fiber type	Singlemode 9/125 μm	
Input power (damage threshold) (dBm)	27	

GENERAL SP	ECIFICATIONS	
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°) cycles minimum
Temperature	Operating Storage	0 °C to 40 °C (32 °F to 104 °F) -40 °C to 70 °C (-40 °F to 158 °F)
Maximum relat	ive humidity	80 % non-condensing at 40 °C
Operation		LTBe-9110 must be connected to an EXFO platform using the provided USB cable. Supported platforms: LTB-1, LTB-2, LTB-8, LTB-12 and FTB-4 Pro.
Instrument driv	ers	IVI drivers, SCPI commands and REST API
Remote control		Via LTB and FTB platform services: GPIB (IEEE-488.1, IEEE-488.2), Ethernet and RS-232
Standard acces	ssories	USB cable, user guide <sup>g</sup> , rackmount bracket and test report

a. Specifications valid at 23 °C  $\pm$  2 °C.



b. Insertion loss per module, including one connector. For guaranteed specification, add  $0.55\ dB$ .

c. Typical specifications.

d. From 1240 to 1260 nm and 1650 to 1680 nm, add 0.5 dB insertion loss (typical).

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

f. At 1550 nm.

g. Available online only.



a. Available for 4 array configurations.

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