

FTBx-9110

MEMS OPTICAL SWITCH



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

KEY FEATURES

- Singlemode 1×N up to 1×12
- Fast switching time of < 30 ms
- Product lifespan of more than 1×10^9 cycles
- Variety of connector options

RELATED PRODUCTS AND ACCESSORIES



Rackmount platform
LTB-12



Variable attenuator
FTBx-3500



Optical light source
FTBx-2150

MEMS-BASED DESIGN

With its MEMS-based design, EXFO's FTBx-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 FTBx-9110 MEMS optical switch is available for singlemode fibers with a choice of 1×2, 1×4, 1×8 and 1×12 modules.

SUPPORTING VARIOUS APPLICATIONS

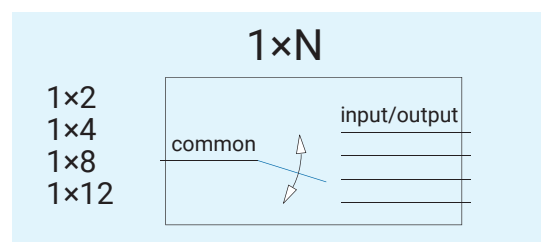
Optical switches are basic components integrated in almost every test station. The FTBx-9110 offers the specifications and features to support a wide variety of applications. Choose it to:

- 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

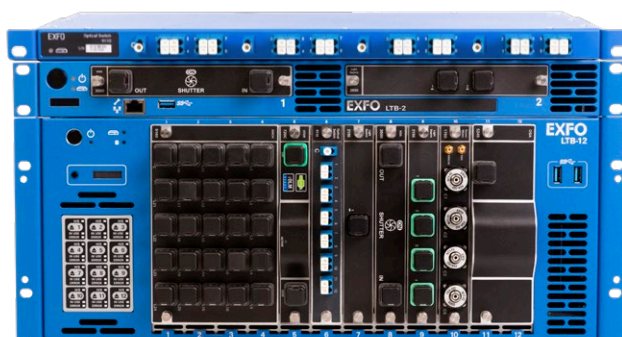
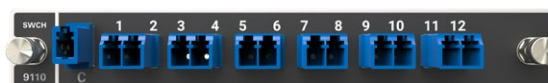
LABORATORY AND FIELD PLATFORMS

The FTBx-9110 is designed to be used with LTB-2, LTB-8, LTB-12 or FTB-4 Pro platforms. EXFO platforms are highly scalable and (except FTB-4 Pro) feature hot-swap capabilities for no downtime or interruption in tests, and greatly improved efficiency.

The FTBx-9110 can easily be remote-controlled by means of the standard LAN or GPIB interface using SPC1 commands, IVI drivers or any other automation software.



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.



SPECIFICATIONS^a

Switch	1×2	1×4	1×8	1×12
Insertion loss (dB) ^{b, c, d}	0.9	0.9	1.2	1.6
Operating wavelength (nm)	1240 to 1680			
Repeatability (dB) ^e	±0.02			
Backreflection (dB) ^c	−50			
Crosstalk (dB) (typical)	50 (60)			
Polarization-dependent loss (dB) ^{c, f}	0.15			
Switching time (ms) ^c	< 30			
Fiber type	Singlemode 9/125 μm			
Input power (damage threshold) (dBm)	27			

GENERAL SPECIFICATIONS

Number of slots	1
Size (H x W x D)	25 mm x 159 mm x 185 mm (1 in x 6 1/4 in x 7 5/16 in)
Switch life	1 billion (10 ⁹) 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 relative humidity	80 % non-condensing at 40 °C
Instrument drivers	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 accessories	User guide ^g and test report

a. Specifications valid at 23 °C ± 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.

ORDERING INFORMATION

FTBx-9110-01-XX-B-XX

Channel configuration ■

02 = 2 channels
 04 = 4 channels
 08 = 8 channels
 12 = 12 channels

■ Connector

58 = FC/APC narrow key^a
 89 = FC/UPC^a
 101 = LC/UPC
 104 = LC/APC

Example: FTBx-9110-01-04-B-101

a. FC connectors are available for 2 and 4 channels configuration only.

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