

FTBx-9110 MEMS optical switch



Feature(s) of this product is/are protected by one or more of: US design patent D798,171.

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

SPEC SHEET

KEY FEATURES

Singlemode 1 x N up to 1 x 12

Fast switching time of ≤ 30 ms

Lifetime expectancy of more than 1×10^9 cycles

Variety of connector options

RELATED PRODUCTS AND ACCESSORIES



Rackmount platform
LTB-12



Variable attenuator
FTBx-3500

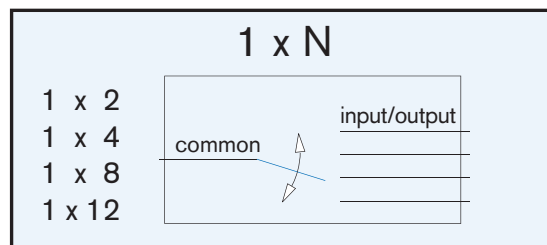


Optical light source
FTBx-2150



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 lifetime expectancy 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 x 2, 1 x 4, 1 x 8 and 1 x 12 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-9110 offers the specifications and features to support a wide variety of applications. Choose it to:

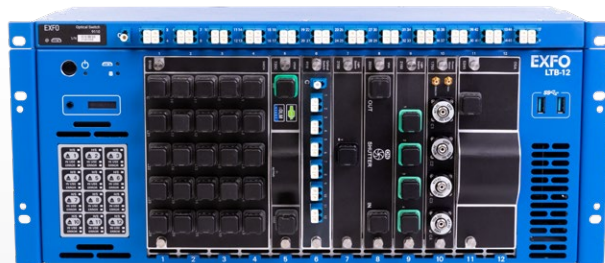
- Analyze transmitted signals using several types of test instruments, such as an optical spectrum analyzer and a bit-error-rate tester
- Reconfigure an R&D or manufacturing test station to allow testing of several types of devices
- Test multiple devices under test (DUTs) in parallel



LABORATORY PLATFORMS

EXFO laboratory platforms are highly scalable and feature the industry's best 100G port density and hot-swap capabilities for no downtime or interruption in tests, and greatly improved efficiency.

The FTBx-9110 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
Operating wavelength (nm)	1260 to 1650			
Insertion loss (dB) (typical) ^b	1.45 (0.9)	1.45 (0.9)	1.75 (1.2)	2.15 (1.6)
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 2, 1 x 4, 1 x 8, 1 x 12
Number of slots	1
Size (H x W x D)	25 mm x 159 mm x 185 mm (1 in x 6 ¼ in x 7 ⅝ 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, SCPI commands and REST API.
Remote control	With LTB-2, LTB-8 and LTB-12 and Ethernet.
Standard accessories	User guide ^f 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

FTBx-9110-01-XX-B-XX

Channel configuration^a

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

Connector

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

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

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

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

EXFO headquarters T +1 418 683-0211 **Toll-free** +1 800 663-3936 (USA and Canada)

EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to www.EXFO.com/contact.

EXFO is certified ISO 9001 and attests to the quality of these products. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.**

For the most recent version of this spec sheet, please go to www.EXFO.com/specs.

In case of discrepancy, the web version takes precedence over any printed literature.