

# FTBx-9150 Optical Switch



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

## KEY FEATURES

1 x 2, 1 x 4, 1 x 8, 1 x 12, 1 x 16, 1 x 24, 1 x 32, 2 x 2, 2 x 4

Singlemode and multimode

High performance

Variety of connector options

## RELATED PRODUCTS AND ACCESSORIES



**Rackmount Platform**  
LTB-8



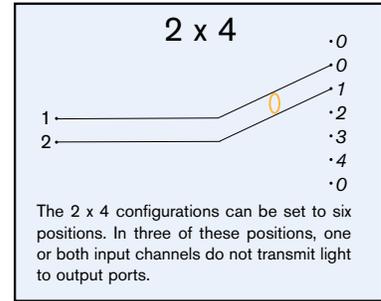
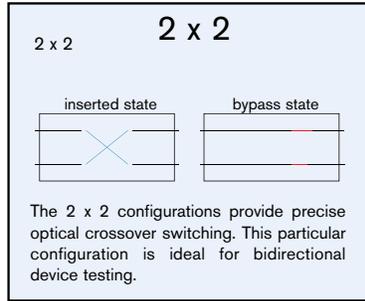
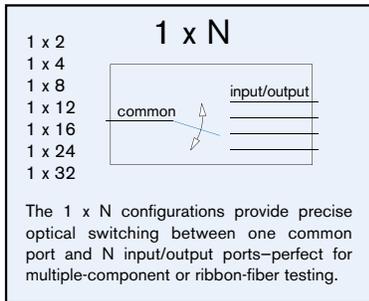
**Power Meter**  
FTBx-1750



**Multi-User Interface**  
EXFO Multilink

## THE OPTICAL SWITCHING SOLUTION

The FTBx-9150 Optical Switch series provides highly accurate and repeatable fiber-to-fiber switching. As part of the LTB-8-based test systems, the FTBx-9150 Optical Switch offers a choice of 1 x 2, 1 x 4, 1 x 8, 1 x 12, 1 x 16, 1 x 24, 1 x 32, 2 x 2 and 2 x 4 modules. Designed for minimal reflectance, the switches integrate precision optical components into a compact modular package. Both singlemode and multimode versions are available and offer a solution for all your optical switching needs.



## SUPPORTING VARIOUS APPLICATIONS

Optical switches are basic components integrated into almost every test station. The FTBx-9150 offers specifications and features to support a wide variety of applications:

- › Multiple component testing
- › Bidirectional testing
- › Automated testing
- › Remote testing
- › Signal monitoring
- › Equipment sharing

## 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-9150 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 <sup>a</sup>							
Model		1 x 2		1 x 4, 1 x 8, 1 x 12, 1 x 16, 1 x 24, 1 x 32, 2 x 4 <sup>b</sup>		2 x 2	
Mode		Singlemode	Multimode	Singlemode	Multimode	Singlemode	Multimode
Insertion loss <sup>c</sup> (dB)	typical	0.5	0.5	0.7	0.5	0.8	0.5
	maximum	1.5	1.5	1.7	1.7	1.5	1.5
Backreflection <sup>d</sup> (dB)	maximum	-55	-24	-55	-24	-55	-24
Repeatability <sup>e</sup> (dB)	maximum	±0.01	±0.01	±0.03	±0.03	±0.01	±0.01
Operating wavelengths (nm)		1290 to 1650	780 to 1350	1290 to 1650	780 to 1350	1290 to 1650	780 to 1350
Polarization-dependent loss <sup>f</sup> (dB)	typical	≤0.05	-	≤0.05	-	≤0.05	-
	standard maximum	0.10	-	0.10	-	0.10	-
Maximum input power (dBm)		+24	+24	+24	+24	+24	+24
Switching time (ms)		25	25	25 per channel + 425 (debouncing)		25	25
Number of channels		1 x 2	1 x 2	1 x 4, 1 x 8, 1 x 12, 1 x 16, 1 x 24, 1 x 32		2 x 2	2 x 2
Crosstalk (dB)		-80	-80	-80	-80	-80	-80

GENERAL SPECIFICATIONS								
Switch		1 x 2	1 x 4	1 x 8	1 x 12, 1 x 16	1 x 24, 1 x 32	2 x 2	2 x 4
Number of slots		1	2	3	4	4	1	2
Dimensions	height	25 mm (1 in)	50 mm (2 in)	75 mm (3 in)	100 mm (4 in)	100 mm (4 in)	25 mm (1 in)	50 mm (2 in)
	width	159 mm (6 ¼ in)	159 mm (6 ¼ in)	159 mm (6 ¼ in)	159 mm (6 ¼ in)	159 mm (6 ¼ in)	159 mm (6 ¼ in)	159 mm (6 ¼ in)
	depth	185 mm (7 ⅝ in)	185 mm (7 ⅝ in)	185 mm (7 ⅝ in)	185 mm (7 ⅝ in)	185 mm (7 ⅝ in)	185 mm (7 ⅝ in)	185 mm (7 ⅝ in)
Switch life		10 million cycles minimum						
Temperature	operating	10 °C to 40 °C (50 °F to 104 °F)						
	storage	-20 °C to 60 °C (-4 °F to 140 °F)						
Relative humidity maximum		80 % non-condensing at 40 °C						
<b>Instruments Drivers</b>								
IVI drivers and SCPI commands								
<b>Remote Control</b>								
With LTB-8 and Ethernet								
<b>Standards Accessories</b>								
User guide and certificate of compliance								

- Notes**
- Specifications valid at 23 °C ± 5 °C.
  - Non-blocking.
  - Insertion loss per module, excluding connectors, measured at singlemode wavelengths of 1310 and 1550 nm, and multimode wavelength of 850 nm.
  - Backreflection is measured at singlemode wavelengths of 1310 and 1550 nm, with APC connectors, and multimode wavelength of 850 nm with UPC connectors.
  - Repeatability values are for 200 cycles per switch module at constant temperature with stabilized source/meter at singlemode wavelengths of 1310 and 1550 nm, and multimode wavelengths of 850 and 1300 nm.
  - Measured at 1550 nm.

**ORDERING INFORMATION**

**FTBx-9150-XX-XX-XX-XX**

**Switch configuration**

- 01 = 1 x N
- 02 = 2 x N<sup>a</sup>

**Channel configuration**

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

**Fiber**

- B = 9/125 µm singlemode
- C = 50/125 µm multimode
- D = 62.5/125 µm multimode

**Connector**

- 50 = FC/PC<sup>b</sup>
- 54 = SC/PC<sup>b</sup>
- 58 = FC/APC narrow key<sup>c</sup>
- 88 = SC/APC<sup>c</sup>
- 89 = FC/UPC<sup>c</sup>
- 91 = SC/UPC<sup>c</sup>
- 101 = LC/UPC<sup>e</sup>
- 104 = LC/APC<sup>c, e</sup>
- EI-EUI-89 = UPC/FC narrow key<sup>d</sup>
- EI-EUI-90 = UPC/ST<sup>d</sup>
- EI-EUI-91 = UPC/SC<sup>d</sup>
- EI-EUI-98 = UPC/LC<sup>d</sup>
- EA-EUI-89 = APC/FC narrow key<sup>c, d</sup>
- EA-EUI-91 = APC/SC<sup>c, d</sup>
- EA-EUI-98 = APC/LC<sup>c, d</sup>

Example: FTBx-9150-01-04-B-EI-EUI-89

**Notes**

- a. 2 x N configurations available only with 2- and 4-channel options.
- b. Multimode only.
- c. Singlemode only.
- d. Available on 1 x 2, 1 x 4, 1 x 8, 1 x 12, 1 x 16, 2 x 2 and 2 x 4 switches.
- e. Available for 1 x 24 and 1 x 32 switches.

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