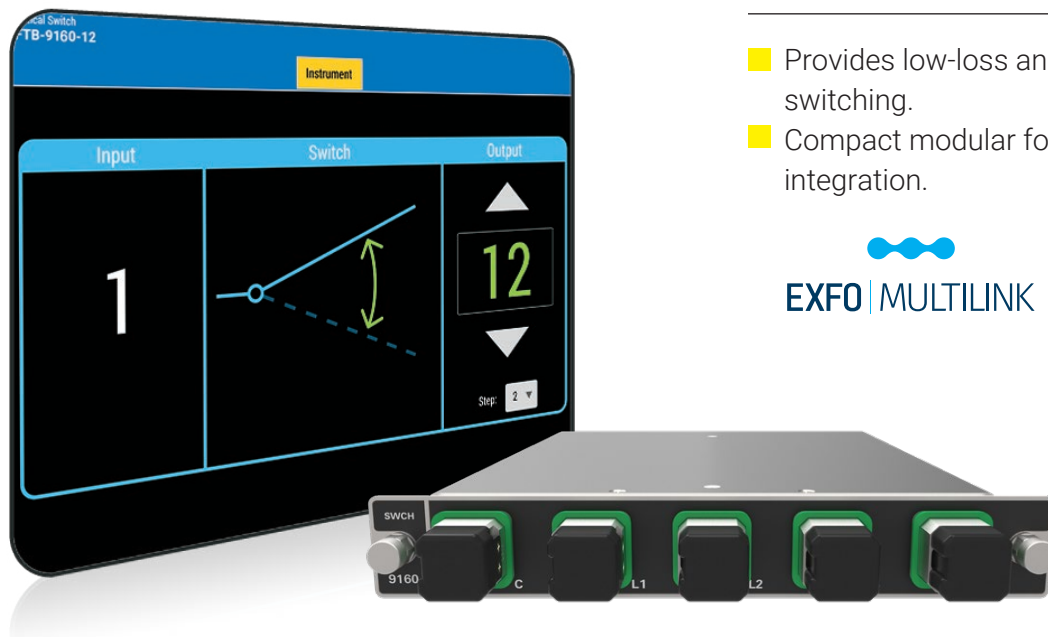


FTBx-9160

OPTICAL SWITCH



- Provides low-loss and repeatable fiber-to-fiber switching.
- Compact modular format ideal for test system integration.



KEY FEATURES

Singlemode, multimode and polarization maintaining (PM) fiber models

1×N up to 1×32

2×2 insert-bypass switching

Fast, repeatable and long life expectancy

RELATED PRODUCTS AND ACCESSORIES



Rackmount platform
LTB-8



Rackmount platform
LTB-2



Rackmount platform
LTB-12



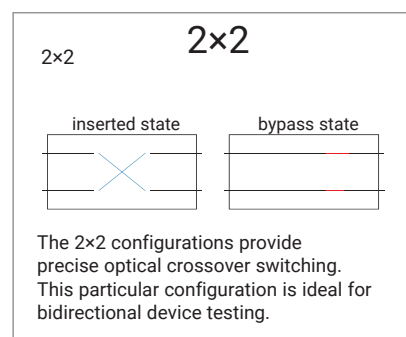
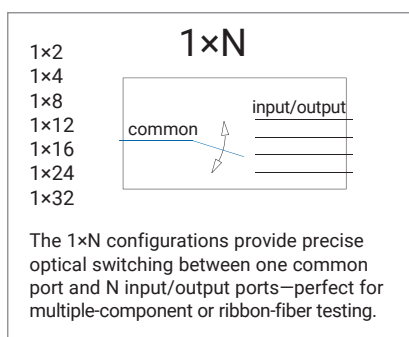
Variable attenuator
FTBx-3500



Light source
FTBx-2150



Power meter
FTBx-1750



SUPPORTING VARIOUS APPLICATIONS

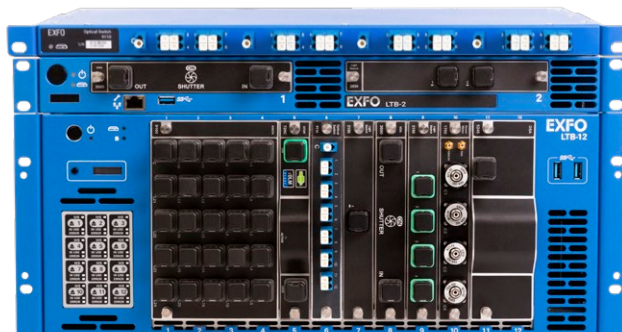
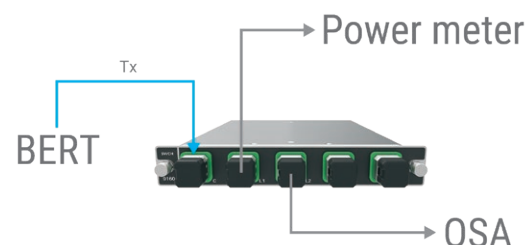
Optical switches are basic components integrated in almost every test station. The FTBx-9160 offers the specifications and features to support a wide variety of applications. Choose it to:

- 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-9160 is designed to be used with the 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-9160 can easily be remote-controlled by means of the standard LAN or GPIB interface using SPCI commands, IVI drivers or any other automation software.



SPECIFICATIONS

SINGLEMODE FIBER ^a							
Switch	2×2 xt	1×2 xt	1×4	1×8	1×12	1×16	1×24, 1×32
Technology	Opto-Mech	MEMS					
Insertion loss (dB) at 1310 nm ^{b,c}	0.9			1.2	1.6	1.8	2.0
Insertion loss (dB) at 1530 nm to 1650 nm ^{b,c}	0.7			1.0	1.2	1.4	1.5
Repeatability (dB) ^d	±0.02						
Back reflection (dB) ^{c,f}	−55	−60	−55				
Crosstalk (dB) ^c	−70	−70	−60				
Polarization-dependent loss (dB) ^{c,e}	0.06	0.06	0.06			0.08	
Switching time (ms)	20		20	30			
Switch life (cycles)	>10 ⁷	>10 ⁹					
Operating wavelength (nm)	1240 to 1680						
Fiber type	Singlemode 9/125 μm						
Input power (damage threshold) (dBm)	27						

MULTIMODE FIBER ^a					
Switch	2×2	1×2	1×4	1×8	1×12
Technology	Opto-Mech	MEMS			
Insertion loss (dB) ^{b, c}	1.0		1.2		
Repeatability (dB) ^{c, d}	±0.02				
Stability (15 minutes) ^c	±0.01				
Back reflection (dB) ^c	−35	−40		−35	
Crosstalk (dB) ^c	−55	−60		−35	
Switching time (ms)	30				
Switch life (cycles)	>10 ⁷	>10 ⁹			
Wavelength range (nm)	760 to 1360				
Fiber type	50/125 OM3				
Input power (damage threshold) (dBm)	27				

a. Specifications valid at 23 °C ± 5 °C.

b. Insertion loss including one connector, measured at singlemode wavelengths of 1310 and 1550 nm, and multimode wavelengths of 850 and 1300 nm.

c. Typical specifications.

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

e. At 1550 nm.

f. With APC connectors.

POLARIZATION MAINTAINING FIBER^a

Switch	2×2	1×2	1×4	1×8	1×12
Technology	Opto-Mech	MEMS			
Insertion loss (dB) ^{b, c}		1.0			1.2
Repeatability (dB) ^{c, d}			±0.02		
Back reflection (dB) ^{c, e}			−55		
Stability (15 minutes) ^c			±0.01		
Crosstalk (dB) ^c		−65			−55
Switching time (ms)			20		
PER (dB) ^c			18		
Axis alignment	Slow axis aligned with key				
Switch life (cycles)	>10 ⁷		>10 ⁹		
Wavelength range (nm)			1240 to 1680		
Fiber type			PM13 Panda		
Input power (damage threshold) (dBm)			27		

a. Specifications valid at 23 °C ± 5 °C.

b. Insertion loss including one connector, measured at 1310 nm.

c. Typical specifications.

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

e. With APC connector.

ORDERING INFORMATION

FTBx-9160-XX-XX-XX-XX-XX

Switch configuration

01 = 1×N

02 = 2×N^a

Channel configuration

02 = 2 channels

04 = 4 channels

08 = 8 channels

12 = 12 channels

16 = 16 channels^c

24 = 24 channels^c

32 = 32 channels^c

Fiber type

B = 9/125 μm singlemode

C = 50/125 μm multimode

PM13 = PM13 polarization maintaining fiber

Crosstalk optimized^b

XT = Crosstalk optimized

Connector

50 = FC/PC^c

54 = SC/PC^c

58 = FC/APC narrow key^d

88 = SC/APC^d

89 = FC/UPC^d

91 = SC/UPC^d

101 = LC/UPC^e

104 = LC/APC^{d, e}

EI-EUI-89 = UPC/FC narrow key^f

EI-EUI-90 = UPC/ST^f

EI-EUI-91 = UPC/SC^f

EI-EUI-98 = UPC/LC^f

EA-EUI-89 = APC/FC narrow key^{d, f}

EA-EUI-91 = APC/SC^{d, f}

EA-EUI-98 = APC/LC^{d, f}

Example: FTBx-9160-01-04-B-EI-EUI-98

a. 2×N configurations available only with 2 channel option.

b. XT option available 1×2 and 2×2 singlemode models.

c. Multimode only.

d. Singlemode and PM13 fiber only.

e. Available for singlemode models only

f. Available on 1x2, 1x4, 1x8, 1x12, 1x16, 1x24 and 2x2 models

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

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