DATA SHEET

100 BASE SFP Optics

HIGHLIGHTS

Extreme Networks® pluggable optics provide physical layer connectivity for optical-port modular switch IO blades and optical-port stackable switches.

- Provides a range of form factor options for enterprise and service provider needs.
- Helps network managers meet their varied and evolving net- work demands.
- Hot-swappable, reliable, and cost-effective optics.

100M BX* FX MMF LX10

Overview

Extreme Networks optics are thoroughly tested and are subject to an extensive qualification process before being considered certified to work in Extreme Networks IO modules and switches. Only proven, qualified vendors are chosen to assist in providing an end-to-end optical solution.

Extreme Networks offers a number of 100BASE optics depending on the customer application and distance required. Each optical interface operates and is managed like a fixed port but gives the customer flexibility to hot-swap or interchange to different optical module types (i.e., SR, LR, ZR).

Key Features

100M FX MMF

- 100FX MMF SFP supports link length of up to 2km on multimode fiber at 125Mbps. This optic works at 1310nm wavelength and uses an LC connector

100M BX-D*

- 100M BX-D SFP supports link length of up to 10km point to point on single mode fiber (1550-nm TX/1310-nm RX wavelength) at 125 Mbps bidirectional. This optic uses an LC connector

100M BX-U*

- 100M BX-U SFP supports link length of up to 10km point to point on single mode fiber (1310-nm TX/1550-nm RX wavelength) at 125 Mbps bidirectional. This optic uses an LC connector

100M LX10

- 100M LX 10 SFP supports link length of up to 10km on single mode fiber at 125Mbps. This optic works at 1310nm wavelength and uses an LC connector

**100BASE-BX optics have two models and must be used in a pair. 100BX is a technology that allows Ethernet connectivity via single fiber cable.*

	FX MMF	BX-D	BX-U	LX10
Fiber Type	Multimode (MMF)	Single-mode (SMF)	Single-mode (SMF)	Single-mode (SMF)
Connector Type	LC	LC	LC	LC
Average Output Power (min/max)	-20/-14 dBm	-14/-8 dBm	-14/-8 dBm	-15/-8 dBm
Receiver Sensitvity (max)	-31 dBm	-28.2 dBm	-28.2 dBm	-25 dBm
Receiver Overload (min)	-14 dBm	-8 dBm	-8 dBm	-8 dBm
Center Wavelength Range (min/max)	1270/1380 nm TX 1260/1570 nm RX	1480/1580 nm TX 1260/1360 nm RX	1260/1360 nm TX 1480/1580 nm RX	1260/1360 nm TX 1260/1580 nm RX
Voltage Range	3.13 to 3.47V	3.13 to 3.47V	3.13 to 3.47V	3.13 to 3.47V
Distance Range	up to 2km	up to 10km	up to 10km	up to 10km
Data Rate	125 Mbps	125 Mbps	125 Mbps	125 Mbps
Mean Time Between Failure (@+40˚ C)	2,697,599 hours	5,198,585 hours	5,198,585 hours	2,270,044 hours
Mean Time Between Failure (@+25˚ C)	5,220,296 hours	9,748,488 hours	9,748,488 hours	4,491,555 hours
Optical link budget	11dB	14dB	14dB	10dB

Technical Specifications

STANDARD

- Operational Shock: 30 m/s2 (3g), 11ms

Safety Compliance

- Compatible with SFP MSA
- Operational Random Vibration: 5-500 Hz @ 1.5 Grms

Physical Specifications

- Dimensions (HxWxD): 0.48x0.54x2.70 in 1.22x1.38x6.86 cm
- Weight: 0.06 lb (25.1 g) unpackaged, 0.30 lb (135 g) packaged
- Shipping box dimensions (HxWxD): 2.1x6.8x7.7 in (5.4x17.2x19.6 cm)

Environmental Conditions

- Temperature: -40° C to 70° C
- Relative Humidity: 10% to 95%
- Shock: 180 m/s2 (18g), 6ms
- Random Vibration: 5 – 20 Hz @ 1.0 ASD w/-3dB/oct. from 20 – 200 Hz
- Drop: 42” (105cm)
- EN 300 019-2-3 v2.1.2 (2003-04), Stationary Use, Class 3.1e
- EN 300 019-2-2 v2.1.2 (1999-09), Public Transportation, Class 2.3

North American Safety of ITE

- UL60950:2000 3rd edition of later, Recognized Component
- CAN/CSA-C22.2 No. 60950-00:2000 3rd Ed or later Recognized Component

European Safety of ITE

- EN60950-1:2001+ all available country deviations
- 2006/95/EC Low Voltage Directive (LVD)
- EN 300 019-2-1 v2.1.2 (2000-09), Storage, Class 1.2

Laser Safety Environmental, Transportation, Storage and Operational

- Operating Temperature: 0° C to 40° C
- Operating Humidity: 5% to 95% non-condensing
- RoHS 6 compliant
- China RoHS compliant
- WEEE Compliant
- EN60825-1:1994, A11:1996, A2:2001
- 21 CFR Subpart J, Class 1 Laser
- CDRH Letter of Approval

***Requires MCP and 6dB Attenuator for 100FX-MMF operation.*

Ordering Information

PART NUMBER	NAME	DESCRIPTION
10058	100BASE-BX SFP BX-D	SFP, 100BASE-BX-D, SMF (1550-nm TX/1310-nm RX wavelength), 125 Mbps bidirectional, LC connector
10059	100BASE-BX SFP BX-U	SFP, 100BASE-BX-U, SMF (1310-nm TX/1550-nm RX wavelength), 125 Mbps bidirectional, LC connector
10066	100BASE-LX10 SFP	SFP, 125 Mbps with transmission distance of 10km, SMF, LC connector
10067	100BASE-FX MMF SFP	SFP, Support for 100M SFP ports, (1310-nm, 125 Mbps , 2km multimode transmission), LC connector

http://www.extremenetworks.com/contact / Phone +1-408-579-2800