

EXFO AXS-110 OTDR



EXFO AXS-110 Handheld OTDR

The AXS-110 Series from EXFO features a set of rugged, lightweight, handheld OTDRs optimized for access/FTTx and LAN/WAN network testing. With a single unit for testing singlemode as well as 50 and 62.5 μm multimode fiber, and wavelengths of 850, 1300, 1310, 1550 nm with respective dynamic ranges of 24, 25, 32, 30 dB, the AXS-110 Series covers the whole range of short-haul OTDR test applications. The series provides complete connectivity flexibility (USB stick compatibility and USB cable download), top user-friendliness (offering one-touch testing, summary screen, macrobend finding) and an unrivaled event dead zone of 0.8 m for easy location and characterization of all events.

SPECIFICATIONS^a

	Multimode	Singlemode
Wavelength (nm)	850/1300	1310/1550
Dynamic Range ^b (dB)	24/25	32/30
Pulse Width (ns)	5, 10, 30, 100, 275, 1000	5, 10, 30, 100, 275, 1000, 2500, 10 000
Event Dead Zone ^c (m)	0.8	0.8
Attenuation Dead Zone ^c (m)	3.5/4.5	4/4.5
Launch conditions ^d	Class CPR 1 or 2	Class CPR 1 or 2
Linearity (dB/dB)	± 0.03	± 0.03
Loss threshold (dB)	0.01	0.01
Loss resolution (dB)	0.01	0.01
Sampling resolution (m)	0.08 to 2.5	0.08 to 5.0
Sampling point	Up to 64 000	Up to 64 000
Distance uncertainty ^e (m)	$\pm (0.75 + 0.0025\% \times \text{distance} + \text{sampling resolution})$	
Distance range (km)	0.1 to 40	0.65 to 260
Typical real-time refresh (Hz)	4	4
Memory capacity	500 traces	500 traces
Measurement time	User-defined	User-defined
Stable source output power ^f (dBm)	- 1.5	- 6.5

GENERAL SPECIFICATIONS

Size (H x W x D)	250 mm x 125 mm x 75 mm (9 7/8 in x 4 15/16 in x 3 in)
Weight	1 kg (2.2 lb)
Operating Temperature	- 18 °C to 50 °C (14 °F to 122 °F)
Storage Temperature	- 40 °C to 70 °C (- 40 °F to 158 °F)
Relative Humidity	0 % to 95 % non-condensing
Power Removable	Li-ion batt. 8 hrs. of continuous operation as per Bellcore TR-NWT-001138
Warranty (years)	1

NOTES

- All specifications valid at 23 °C \pm 2 °C (73.4 °F \pm 3.6 °F) with an FC/PC connector, unless otherwise specified.
- Typical dynamic range with longest pulse and three-minute averaging at SNR = 1. Multimode dynamic range is specified for 62.5 μm fiber; a 3 dB reduction is seen when testing 50 μm fiber.
- Typical dead zone for multimode reflectance below -35 dB and singlemode reflectance below -45 dB, using shortest pulse.
- For multimode port, controlled launch conditions allow 50 μm and 62.5 μm multimode fiber testing.
- Does not include uncertainty due to fiber index.
- Typical output power is given at 1300 nm for multimode output and 1550 nm for singlemode output.

Unique Advantages

- FasTrace function: one-touch testing for top user-friendliness
- 8-hour power autonomy
- Lightweight: 1 kg
- USB port (memory-stick compatible) for easy data transfer
- Large internal memory (up to 500 results)
- Transflective color display for viewing clear results under bright sunlight
- Superior automated analysis for a better, easier and faster diagnosis
- Automatic pass/fail analysis and macrobend locating
- Auto-zoom on events

ORDERING INFORMATION

PRODUCT #	DESCRIPTION	WAVELENGTHS	DYNAMIC RANGES	PRICE
AXS-110-QUAD	All-fiber model that combines singlemode and multimode capabilities for enterprise/campus/access networks	850/1300/1310/1550 nm	24/25/32/30 dB	\$10,000.00
AXS-110-MM	Multimode model optimized for enterprise/premises/private network testing on both 50 and 62.5 μm multimode fiber	850/1300 nm	24/25 dB	\$7,500.00
AXS-110-SM	Singlemode model ideal for FTTx/access and CATV testing	1310/1550 nm	32/30 dB	\$7,500.00