AXS-200/350

OPTICAL LOSS TEST SET

FROST & SULLIVAN
2011 BEST PRACTICES AWARD
GLOBAL PORTABLE FIBER OPTIC TEST EQUIPMENT MARKET SHARE LEADERSHIP AWARD

SPEC SHEET

As part of the SharpTESTER line LAN applications, this is the ideal tool for network-link characterization.

KEY FEATURES

- Straightforward step-by-step loss testing wizard
- Clear, LED-based pass/fail assessment
- Error-free, semi-automatic loss testing
- Fiber inspection probe (FIP) option to quickly identify dirty and damaged connector problems
- Compliant with the IEC 61280-4-1 standard—a first in the industry*

* Loss measurements performed on 50/125 µm multimode fiber using an external conditioner comply with the encircled flux requirements for launch conditions of the IEC 61280-4-1 standard.

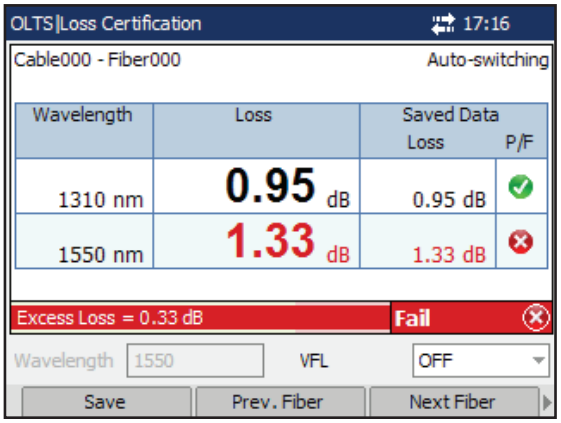
EXFO | Assessing Next-Gen Networks

IDEAL FOR NETWORK-LINK CHARACTERIZATION

Combined with EXFO's future-proof AXS-200 Handheld Modular Platform, the AXS-200/350 Optical Loss Test Set (OLTS) is the ideal tool for network-link characterization. Designed for first-class ease of use, the AXS-200/350 features a pass/fail LED indicator; what's more, it lets you set your own thresholds for loss measurements.

Thanks to its large data storage and its standard reporting software, the AXS-200/350 facilitates data management and enables data transfer via USB connection. It also offers complete test reporting, including link certification using pass/fail information.

When equipped with an optional fiber inspection probe, this tool validates that all connections made with connectors/adapters are clean and free of defects. The controlled multimode launch conditions ensure reliable and repeatable loss measurements, thus avoiding loss variations.

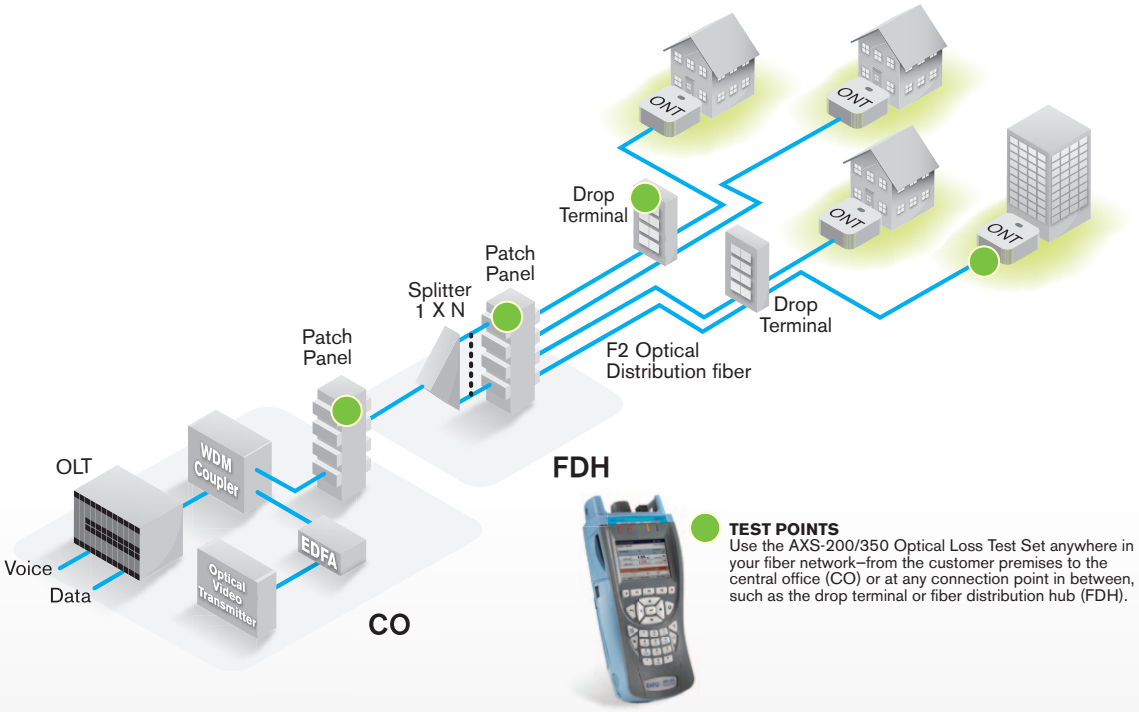


Quick access to test results.

EASY OPERATION. CLEAR RESULTS. ERROR-FREE TESTING.

KEY FEATURES AND BENEFITS

LED-based pass/fail assessment; loss testing wizard for error-free, semi-automatic measurements	Reduces operator errors and testing time in typical measurement situations
SharpTESTER platform characteristics include: modularity, connectivity, weather-proofness and an easy-to-read color screen	Expands with your network and service test requirements, covering copper/DSL/triple-play, Ethernet and other optical applications; transflective screen for optional viewing; easy data transfer via USB connection
Fiber inspection probe support	Ensures that connectors/adapters are clean and free of defects
Visual fault locator option	Provides quick and easy troubleshooting
CWDM-ready and equipped with a high-power detector	Comes standard with 40 calibrated wavelengths, covering all CWDM wavelengths; supports high-power GeX for CATV and FTTx radio frequency overlay applications
Controlled multimode	Designed to provide reliable loss measurements



EXFO's AXS-200/350 in the access network.

ERROR-FREE TEST FEATURES IN A HIGHLY VERSATILE MODULE

When using the AXS-200/350 in Auto-Switching mode, the light source automatically toggles between available wavelengths. The power meter also recognizes the wavelengths and automatically switches to the proper wavelength. With the push of a button, you can store results for all wavelengths at once, speeding up and simplifying test cycles.

Thanks to its unique design, the AXS-200/350 OLTS reduces both the risk of error and the measurement time in typical situations, since the need for an offset nulling is eliminated.

In addition to network-link characterization features, the highly accurate AXS-200/350 offers over 40 calibrated wavelengths, including all CWDM wavelengths. Plus, its Hold Min/Max Power function lets you measure power fluctuations.

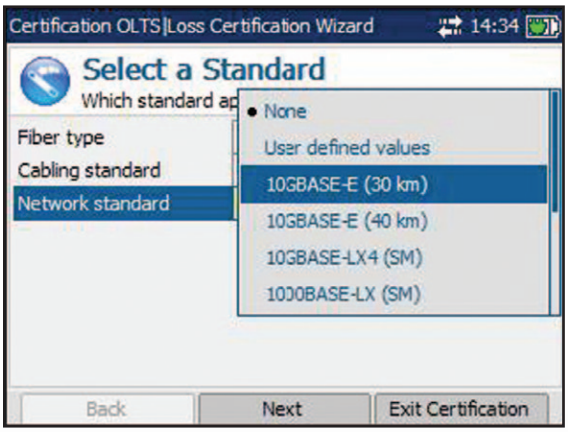
FTTx-ready

EXFO's AXS-200/350 allows for the testing of passive optical networks (PONs) at 1310 nm, 1490 nm and 1550 nm; the three wavelengths recommended by the ITU-T (G.983.3) for PONs.

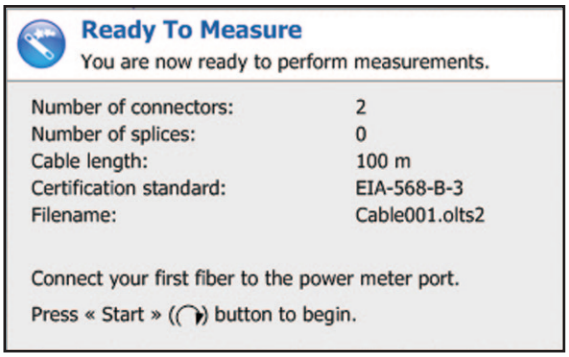
Certify your network in a snap

First, edit and save your standard. Then get the test results as follows:

1. Select a standard
2. Follow the easy step-by-step loss wizard
3. Set the reference
4. Start the test



Select a standard.



Step-by-step loss wizard.

Retest fibers as needed

If the loss measured is above the budget, the fiber can be easily retested.

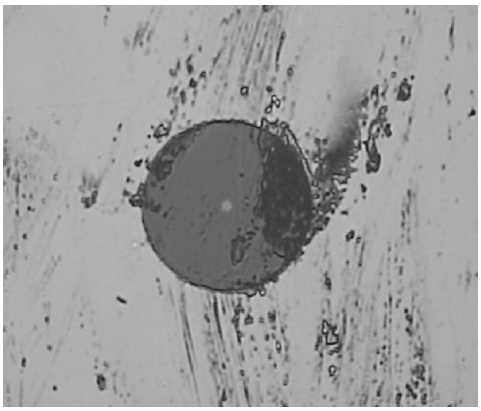
View all results at a glance

Once the cable is completely tested, the AXS-200/350 displays a table of all values measured along with a pass/fail status, based on user-entered fiber lengths.

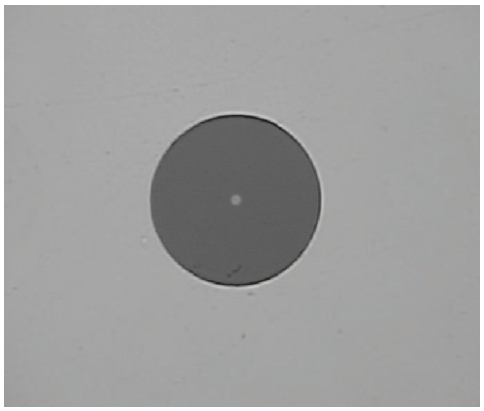
Connector inspection and cleaning

It's a fact: most fiber network problems are caused by dirty, damaged or improperly installed connectors, which can lead to erroneous test results or poor transmission. Using an FIP to ensure connectors/adapters are clean and exempt from any defect is where accurate testing starts.

Simply plug the FIP-400 Fiber Inspection Probe into the FIP port on the AXS-200/350 to take advantage of unmatched optical resolution and therefore, avoid failed certification testing.



Dirty connector.

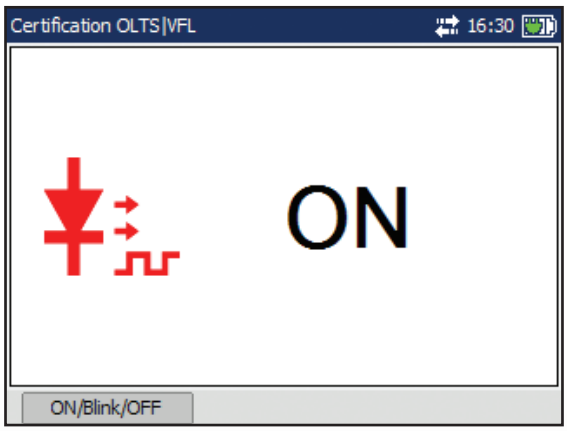


Clean connector.

AXS-200/350 with FIP-400.

Simpler troubleshooting

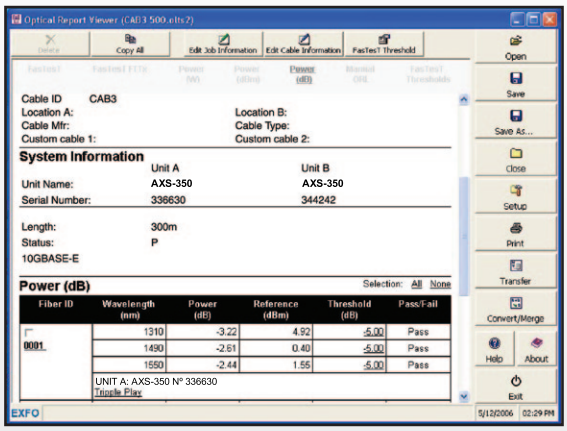
Troubleshoot link problems such as bad splices, macrobends and fiber breaks, using EXFO's visual fault locator. The VFL's bright red light helps you visually locate many near-end fiber faults and test polarity. With this valuable and cost-effective option, you will benefit from another opportunity to expand your business.



Visual fault locator.

Comprehensive certification reports using Optical Report Viewer

Save, upload, manage and print comprehensive certification reports with EXFO's Optical Report Viewer. This software offers many feaures, including pass/fail thresholds, that are active during download, automatically activated and displayed in the viewer. It also allows you to generate professional-quality reports and detailed documentation.



Optical Report Viewer: main window.

AXS-200/350 SPECIFICATIONS [a]

Power Meter [b]	**AXS-200/352**		**AXS-200/352X**	
Detector	Ge		GeX	
Power range (dBm) [c]	10 to –75		26 to –59	
Wavelength range (nm)	800 to 1650		800 to 1650	
Calibrated wavelengths (nm)	800, 820, 830, 840, 850, 860, 870, 880, 910, 980, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1340, 1350, 1370, 1390, 1410, 1430, 1450, 1460, 1470, 1480, 1490, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570, 1580, 1590, 1600, 1610, 1620, 1630, 1640, 1650		Same calibrated wavelengths as the AXS-352 plus 1060 nm	
Power uncertainty [d]	±5 % ± 31 pW		±5 % ± 1.2 nW	
Resolution (dB)	±0.01 (10 dBm to –60 dBm)		±0.01 (26 dBm to –45 dBm)	
Automatic offset nulling [e]	Yes		Yes	
Display units	dB, dBm, W		dB, dBm, W	
Tone detection	270 Hz, 1 kHz and 2 kHz		270 Hz, 1 kHz and 2 kHz	
Auto-switching [f]	Yes		Yes	
Warm-up period (min) [e]	0		0	
Data storage (fibers)	More than 10 000		More than 10 000	
Battery life (hours) (typical in Auto mode)	8		8	
Recommended calibration interval (years) [g]	3		3	
Source Model	**12D**	**23BL**	**234BL**	**235BL**
Nominal wavelength (nm)	850 ± 25 1300 ± 50/–10	1310 ± 20 1550 ± 20	1310 ± 20 1550 ± 20 1625 ± 15	1310 ± 20 1490 ± 10 1550 ± 20
Spectral width [h] (nm)	50/135	≤ 5	≤ 5	≤ 5
Output power (dBm)	≥ –20/≥ –20 (62.5/125 µm)	≥ 1/≥ 1	≥ 1/≥ –3/≥ –5	≥ 1/≥ –4.5/≥ –3
Power stability (dB) [i] 15 min 8 h	 ±0.05 ±0.1	 ±0.03 ±0.1	 ±0.03 ±0.1	 ±0.03 ±0.1
Auto-switching	Yes	Yes	Yes	Yes
Tone generation	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz	270 Hz, 1 kHz, 2 kHz
Battery life (hours) (typical in Auto mode)	8	8	8	8
Automatic wavelength recognition	Yes	Yes	Yes	Yes

Notes

a. At 23 °C ± 1 °C and with an FC connector.

b. At 1550 nm, unless otherwise specified.

c. Sensitivity defined as 6 x RMS noise level.

d. For calibrated wavelengths, valid up to 5 dBm for AXS-200/352 and up to 15 dBm for AXS-200/352X.

e. For a variation of ±0.05 dB, from 18 °C to 28 °C, for power > –50 dBm for AXS-200/352 and > –40 dBm for AXS-200/352X.

f. At 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm; for power > –50 dBm for AXS-200/352 and > –40 dBm (typical) for AXS-200/352X.

g. For power meter only.

h. RMS for FP lasers and –3 dB width for LEDs (typical values for LEDs).

i. After a 15-minute warm-up, and using an APC connector on the power meter (except for multimode sources, for which a PC connector is used). Expressed as ± half the difference between the maximum and minimum values measured during the period.

GENERAL SPECIFICATIONS

Module and plateform size (H x W x D)	284 mm x 125 mm x 82 mm (11 3/16 in x 4 15/16 in x 3 1/4 in)
Module and plateform weight (with battery)	1.46 kg (3.22 lb)
Temperature operating storage	 –10 °C to 50 °C (14 °F to 122 °F) –40 °C to 70 °C (–40 °F to 158 °F)
Humidity	5 % to 95 % relative, non-condensing
Power supply input	100 V to 240 V to AC at 1.8 A, 50 Hz to 60 Hz
Power supply output	18 V to 24 V DC at 3.3 A to 2.50 A, 60 W
Battery	Internal rechargeable Li-Ion battery, with battery state indication
Self-test	Routine on power-up
Results storage	128 MB
Languages	English, French, German, Spanish, Chinese (Simplified and Traditional), Russian, Korean
Warranty (years)	3

STANDARD ACCESSORIES

CD-based user guide, Certificate of Calibration, AC adapter/charger, connector adapter (FOA-XX), lithium ion battery, shoulder strap, carrying case, USB cable, reporting software

VISUAL FAULT LOCATOR (VFL)

Emitter type	Laser
Wavelength (nm)	650
Output power (dBm) [a]	3

LASER SAFETY

21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001:
CLASS 1 LASER PRODUCT
CLASS 3R LASER PRODUCT FOR VFL

Notes

a. Typical values in 62.5/125 µm fiber.

ORDERING INFORMATION

TK-AXS-350-2-XX-XX-XX-XX-XX-XX-XX-XX

Model
TK-AXS-350-2

Probe Option
00 = Without FIP
FP4D = 200x/400x video inspection probe
FP4S = 400x video inspection probe

Platform Software Option
00 = Without FIP software
FPS = With FIP software [a]

Model
A1 = Ge detector, 850/1300 nm LED source (62.5/125 µm)
A2 = Ge detector, 1310/1550 nm laser source (9/125 µm)
A3 = GeX detector, 1310/1550 nm laser source (9/125 µm)
A4 = Ge detector, 1310/1550/1625 nm laser source (9/125 µm)
A5 = GeX detector, 1310/1550/1625 nm laser source (9/125 µm)
A6 = Ge detector, 1310/1490/1550 nm laser source (9/125 µm)
A7 = GeX detector, 1310/1490/1550 nm laser source (9/125 µm)
A8 = Ge detector, 850/1300 nm LED and 1310/1550 nm laser source (9/125 µm)

Connector
EI-EUI-28 = UPC/DIN 47256
EI-EUI-76 = UPC/HMS-10/AG
EI-EUI-89 = UPC/FC narrow key
EI-EUI-90 = UPC/ST
EI-EUI-91 = UPC/SC
EI-EUI-95 = UPC/E-2000

Documentation Language
A = English
C = Chinese (Simplified)
E = Spanish
F = French
G = German
K = Korean
R = Russian
V = Chinese (Traditional)

Connector Adapter
FOA-12 = Biconic
FOA-14 = D4, D4/PC
FOA-16 = SMA/905, SMA/906
FOA-22 = FC (PC/SPC/UPC/APC), NEC-D3
FOA-28 = DIN 47256 (LSA): DIN 47256 (PC/APC)
FOA-32 = ST (PC/SPC/UPC)
FOA-40 = Diamond HMS-OHFS-3 (3.5 mm)
FOA-54 = SC (PC/SPC/UPC/APC)
FOA-76 = FSMA HMS-10/AG, HFS-10/AG
FOA-78 = Radiall EC
FOA-84 = Diamond HMS-10, HFS-13
FOA-96B = E-2000
FOA-98 = LC
FOA-99 = MU

VFL Option
00 = Without VFL
VFL = With VFL

Example: TK-AXS-350-2-FP4D-FPS-A3-EI-EUI-91-VFL-FOA-54-A

Note

a. Mandatory with FP4D or FP4S.

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