

# AXS-200/360

part of the SharpTESTER Access Line

NETWORK TESTING—OPTICAL



## Features/Benefits

- Complete cost-efficient test set for Tier-1 certification, based on EXFO's revolutionary modular platform AXS-200 SharpTESTER
- Editable and user-definable thresholds, consistent with all and latest industry standards
- Fiber inspection probe (FIP) support for clean and in good condition connectors
- Fiber loss wizard for step-by-step user-friendliness
- Reliable and repeatable loss measurements, thanks to controlled multimode launching conditions
- Pass/fail results on a bright, transfective screen for optimal viewing
- Automatic wavelength toggling



## Simplifying Certification Testing

Private network operators, as well as contractors and installers must make sure the fiber link is installed properly and within specification prior to commissioning the network. This will always be their responsibility. Fiber certification and documentation are also key to ensuring the quality of network installation and meeting industry standards.

The AXS-200/360 Fiber Certification Tester provides unparalleled ease of use and accuracy to perform all fiber certification and troubleshooting tasks. Moreover, it makes it simple to certify fiber to the latest standards.

Combined with the AXS-200 Handheld Modular Platform, the AXS-200/360 supports a user-friendly interface and numerous features. Optimized for numerous applications such as 10 Gbit/s, this module delivers optical loss measurements at multiple wavelengths automatically, verifies user-inputted fiber length, inspects connectors with the optional fiber inspection probe (FIP) and detects breaks with the optional visual fault locator (VFL).

OLTS   Loss Certification			
Cable002 - Fiber000		Auto-wavelength	
Wavelength	Loss	Saved Data Loss	P/F
850 nm	<b>0.65</b> dB	0.63 dB	✓
1300 nm	<b>0.72</b> dB	0.71 dB	✓
Margin = 0.25 dB			<b>Pass</b> ✓
Wavelength	1300nm	VFL	OFF
Save		Prev. Fiber	Next Fiber

Quick access to test results.

Easy operation. Clear results. A complete test set for Tier-1 certification.



## An Essential Tool for Enterprise, Installers and Contractors

### Key features and benefits

Industry standards support	Offers user-configurable thresholds, consistent with industry standards: TIA/EIA-568-B.3, ISO/IEC-11801, 10GBASE-LX4, 10GBASE-L, 10GBASE-E, 10GBASE-S, 1000BASE-SX, 1000BASE-LX, 100BASE-FX, 10BASE-FB, 10BASE-FL, FDDI, ATM-155, ATM-622, Token Ring 4 and 16 Mbit/s, Fibre Channel 1062 Mbit/s.
Controlled multimode launching conditions	Complies with the latest developments in encircle flux standards, providing the most reliable loss measurements.
AXS-200 SharpTESTER platform main characteristics: modularity, connectivity, weather-proof and color display	Expands with your network and service test requirements, covering copper/DSL/triple-play, Ethernet and other optical applications.
FIP support	Ensures that you perform a connection with clean connectors/adapters, exempt of any defect.
Step-by-step fiber loss wizard	Guides the user through quick procedures, limiting testing time and operator errors.
User-friendliness	Displays straightforward, automated test results with user-definable pass/fail criteria, no interpretation is required; possibility to interchange connectors for perfect referencing setup.
Low cost of ownership	Allows you to bid on more contracts, thanks to this dedicated fiber tester that certifies singlemode and multimode fiber networks; offers a three-year warranty and recommended calibration interval; is less expensive than main competitors' instruments.

## Built for LAN Networks

### Network certification in four easy steps

- 1 Select Standard or Application
- 2 Follow the step-by-step fiber loss wizard
- 3 Set reference
- 4 Start the test

The AXS-200/360 automatically completes loss measurements at 850 and 1300 nm wavelengths (SM) or 1310 and 1550 nm wavelengths (MM), compares results against industry standards such as TIA-568-B and provides pass/fail analysis in compliance with those standards.

### Retest fibers as needed

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

### View all results at a glance

Once the cable is completely tested, the AXS-200/360 displays a table of all values measured along with pass/fail status, based on user-inputted fiber length.



EXFO's AXS-200/360 in the LAN network.



### A complete fiber certification test set

In addition to an OLTS, fiber certification requires a light source, namely the FLS-600 Light Source, which comes with the AXS-200/360.

- Up to three singlemode wavelengths (1310, 1550, and 1490 or 1625 nm) on a single port, or four wavelengths (850/1300 nm and 1310/1550 nm) on two ports
- New controlled multimode launching conditions for reliable loss measurements
- Three-year warranty and recommended calibration interval, for low cost of ownership
- Rechargeable batteries

## Error-free, time-saving test features: automatic wavelength switching and distant referencing

The FLS-600's Auto-Switching mode allows you to automatically toggle between available wavelengths. When using this source with the AXS-200/360, the latter recognizes the wavelength in use and switches to the proper calibration parameter.

A signal can be sent remotely, giving the power meter information on the source wavelength and output power to be used as reference and helping ensure efficient referencing—even when the source and power meter are far apart.

This feature also applies when using a compatible power meter (e.g., the FPM-600 and FOT-600).

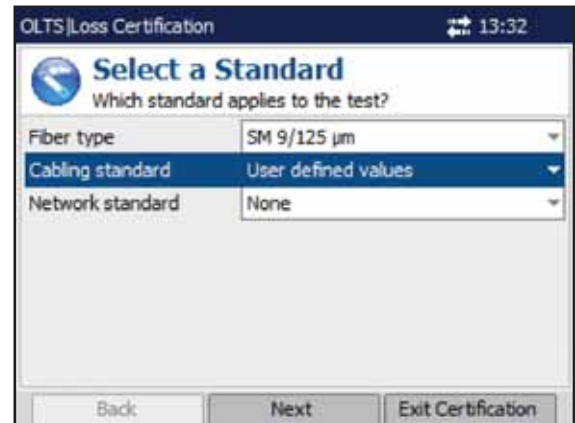
## Multimode and singlemode fibers certification

Your network may be comprised of multimode and singlemode fibers. Thanks to EXFO's complete test set, you only need one tester—the AXS-200/360. This instrument allows you to qualify a link for up to 10 Gigabit Ethernet transmission on both fiber types.

## 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 a FIP to ensure connectors/adapters are clean and exempt of any defect is where accurate testing starts.

Avoid failing certification testing thanks to the FIP port on the AXS-200/360. Just plug EXFO's efficiently designed, unmatched FIP-400 Fiber Inspection Probe and you are all set! You will get the best ever optical resolution.



## Facilitating troubleshooting

Troubleshoot simple link problems using EXFO's visual fault locator. The VFL's bright red light helps you visually locate many near-end fiber faults and tests polarity. With this valuable option, you will benefit from another opportunity to expand your business.

## Comprehensive certification reports using Optical Report Viewer

Save, upload, manage and print comprehensive certification reports with EXFO's Optical Report Viewer. This software tool enables you to produce professional-looking reports with detailed documentation. Moreover, it offers a one-touch-result-storage function for all wavelengths at once.

### SPECIFICATIONS FLS-600<sup>a</sup>

Model	12D	23BL	234BL	235BL
Central 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 <sup>b</sup> (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) <sup>c</sup>	15 min ±0.05 8 h ±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)	50	50	50	50
Warranty and recommended calibration interval (years)	3	3	3	3

### SPECIFICATIONS AXS-360<sup>a</sup> PRELIMINARY

Model	AXS-362
Detector	Ge
Power range (dBm) <sup>b</sup>	10 to -70
Wavelength range (nm)	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
Power uncertainty <sup>c</sup>	±5 % ± 0.1 nW
Resolution (dB)	±0.01 (10 dBm to -60 dBm)
Automatic offset nulling <sup>d</sup>	Yes
Display units	dB, dBm, W
Tone detection	270 Hz, 1 kHz and 2 kHz
Auto-switching <sup>e</sup>	Yes
Warm-up period (min) <sup>f</sup>	0
Data storage (items)	more than 1000
Battery life (hours) (typical)	72
Warranty and recommended recalibration interval (years)	3

### GENERAL SPECIFICATIONS

Module size (H x W x D)	283 mm x 125 mm x 92 mm	(11 1/8 in x 4 15/16 in x 3 5/8 in)
Module weight (with battery and transceivers)	1.2 kg	(2.6 lb)
Temperature		
operating	0 °C to 50 °C	(32 °F to 122 °F)
storage	-20 °C to 70 °C	(-4 °F to 158 °F)
Humidity	5 % to 95 % relative, non-condensing	
Power supply input	110-240 V to AC at 1.8A, 50 Hz to 60 Hz	
Output	18 V to 24 V DC at 3.33 A to 2.50 A, 60 W	
Battery	Internal rechargeable Li-Ion battery, with battery state indication	
Test connections	Five colored banana for T, R, G, T1, R1	
Differential voltage protection	125 VRMS or 400 VDC max	
Common mode voltage protection	1000 VRMS	
Self-test	Routine on power-up	
Voltage detection	> 20 V will trigger alarm message	
Results storage	128 Mbytes	
Languages	English, French, German, Spanish, Chinese (Simplified)	

Specifications based on 24 AWG (0.5 PE mm) cabling and subject to change without notice.

#### NOTES

- Guaranteed unless otherwise specified. All specifications valid at 1550 nm and 23 °C ± 1 °C, with an FC connector.
- In CW mode; sensitivity defined as 6 x rms noise level.
- For calibrated wavelengths. Valid up to 20 dBm for FPM-602X.
- For power > -40 dBm for FPM-602, and > -25 dBm for FPM-602X.
- At 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1650 nm; for power > -50 dBm for FPM-602 and > -40 dBm (typical) for FPM-602X.
- For a variation of ≤ 0.06 dB at power levels ≥ -40 dBm for FPM-602 and ≥ -25 dBm for FPM-602X.

## ORDERING INFORMATION

### AXS-362-XX-XX

**Model** ■

AXS-362 = Fiber Certification, Ge detector

**Option** ■

00 = Without VFL

VFL = With VFL

■ **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

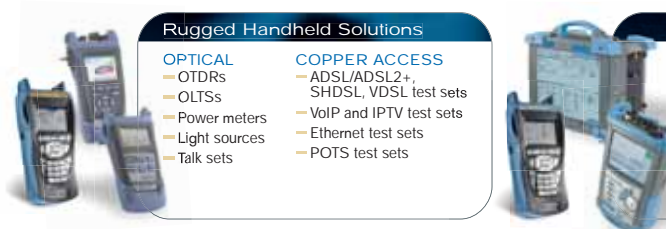
FOA-84 = Diamond HMS-10, HFS-13

FOA-96B = E-2000

FOA-98 = LC

FOA-99 = MU

Example: AXS-362-VFL-FOA-54



**Rugged Handheld Solutions**

- OPTICAL**
  - OTDRs
  - OLTSs
  - Power meters
  - Light sources
  - Talk sets
- COPPER ACCESS**
  - ADSL/ADSL2+, SHDSL, VDSL test sets
  - VoIP and IPTV test sets
  - Ethernet test sets
  - POTS test sets

**Platform-Based Solutions**

- OPTICAL FIBER**
  - OTDRs
  - OLTSs
  - ORL meters
  - Variable attenuators
- DWDM TEST SYSTEMS**
  - OSAs
  - PMD analyzers
  - Chromatic dispersion analyzer
- TRANSPORT AND DATACOM**
  - Next-generation SONET/SDH and OTN testers
  - SONET/DSn (DS0 to OC-192) testers
  - SDH/PDH (64 kbit/s to STM-64) testers
  - T1/T3, E1 testers
  - 10/100 Mbit/s and Gigabit Ethernet testers
  - Fibre Channel testers
  - 10 Gigabit Ethernet testers

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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit [www.EXFO.com/recycle](http://www.EXFO.com/recycle). Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.

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