

AXS-200/350

part of the SharpTESTER Line
LAN Applications

NETWORK TESTING—OPTICAL



Features/Benefits

- 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 prevent dirty and damaged connector problems
- Compliant with the IEC 61280-4-1 standard—a first in the industry*

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



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 report, including certification of the link with pass/fail information.

Moreover, the optional fiber inspection probe ensures that you perform a connection with clean connectors/adapters, exempt from any defect, while the controlled multimode launching conditions ensure reliable and repeatable loss measurements, avoiding loss variation due to uncontrolled launch conditions.

OLTS Loss Certification			
Cable000 - Fiber000		Auto-switching	
Wavelength	Loss	Saved Data Loss	P/F
1310 nm	0.95 dB	0.95 dB	✓
1550 nm	1.33 dB	1.33 dB	✗
Excess Loss = 0.33 dB			Fail ✗
Wavelength	1550	VFL	OFF
Save		Prev. Fiber	Next Fiber

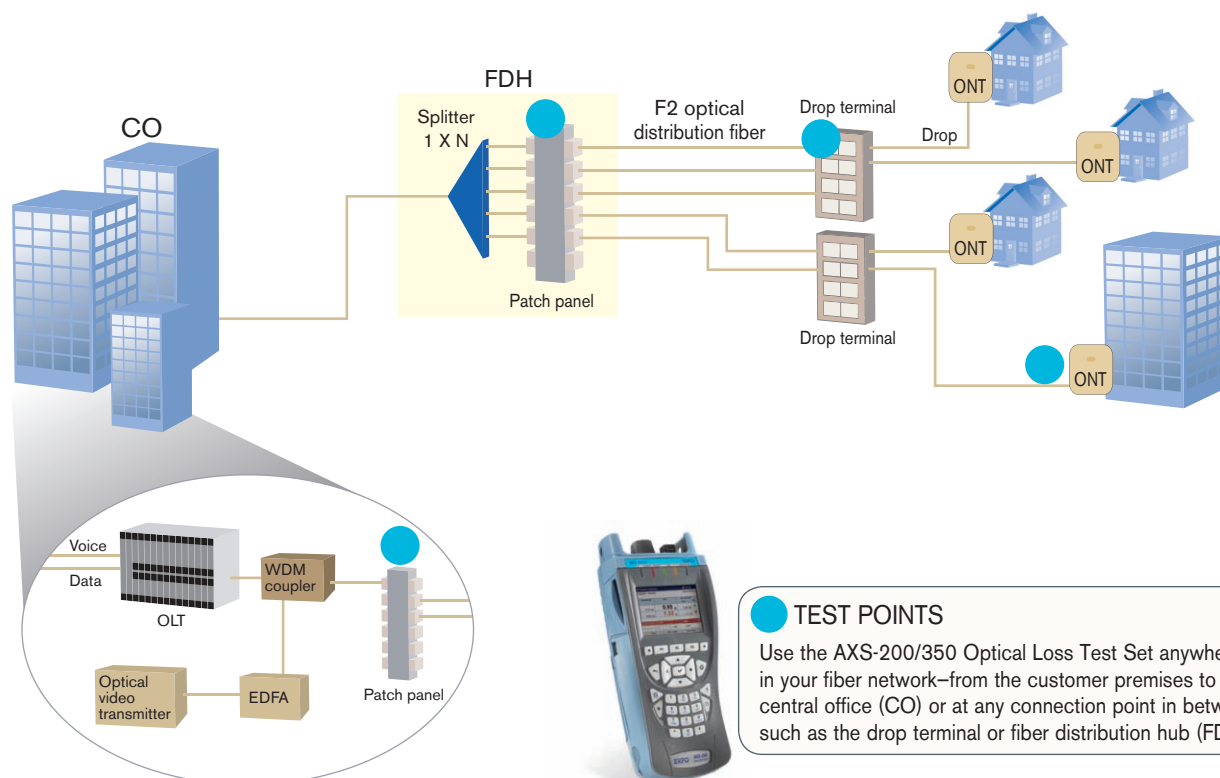
Quick access to test results.

Easy operation. Clear results. Error-free testing.



Key features and benefits

Easy-to-read, LED-based pass/fail assessment; loss testing wizard for error-free, semi-automatic measurements	Reduces operator errors and testing time in typical measurement situations.
AXS-200 SharpTESTER platform main characteristics: modularity, connectivity, weather-proofness and high-legibility color screen	Expands with your network and service test requirements, covering copper/DSL/triple-play, Ethernet and other optical application; transfective screen for optional viewing; easy data transfer via USB connection.
Fiber inspection probe support	Ensures that connectors/adapters are clean and exempt from any defect.
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.



TEST POINTS

Use the AXS-200/350 Optical Loss Test Set anywhere in your fiber network—from the customer premises to the central office (CO) or at any connection point in between, such as the drop terminal or fiber distribution hub (FDH).

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 recognizes the wavelengths and automatically switches to the proper wavelength. With a press 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, as 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. What's more, it lets you measure power fluctuations with its Hold Min/Max Power function.

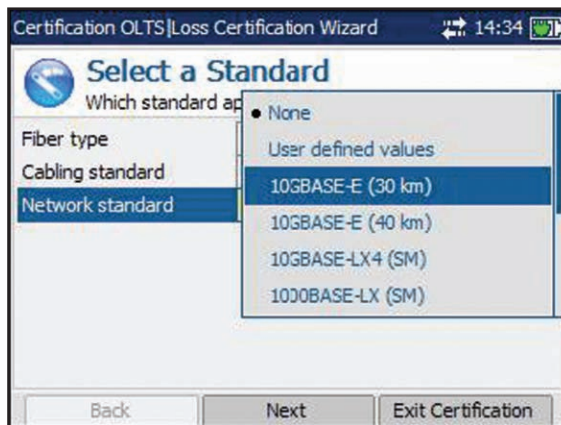
FTTx-ready

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.

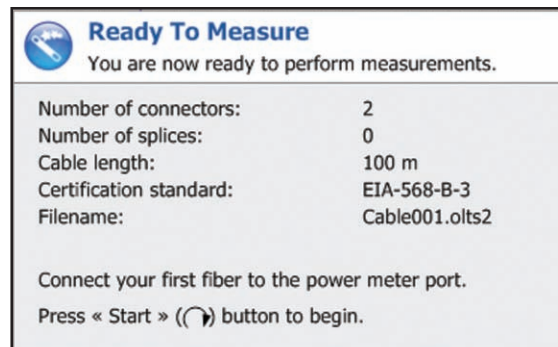
Certify your network in a snap

At first, just edit and save your standard. Then get the test results following these easy steps:

- 1 Select a standard
- 2 Follow the easy step-by-step loss wizard
- 3 Set 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 easily be retested.

View all results at a glance

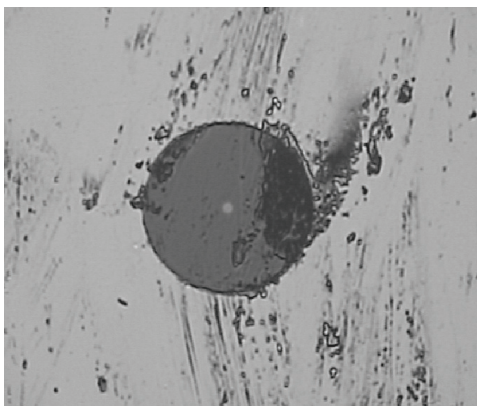
Once the cable is completely tested, the AXS-200/350 displays a table of all values measured along with pass/fail status, based on user-inputted fiber lengths.



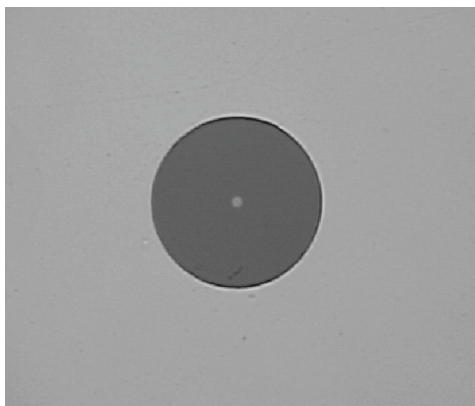
Connector inspection and cleaning

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.

Avoid failing certification testing thanks to the FIP port on the AXS-200/350. Just plug EXFO's efficiently designed, FIP-400 Fiber Inspection Probe and you benefit from an unmatched optical resolution.



Dirty connector.



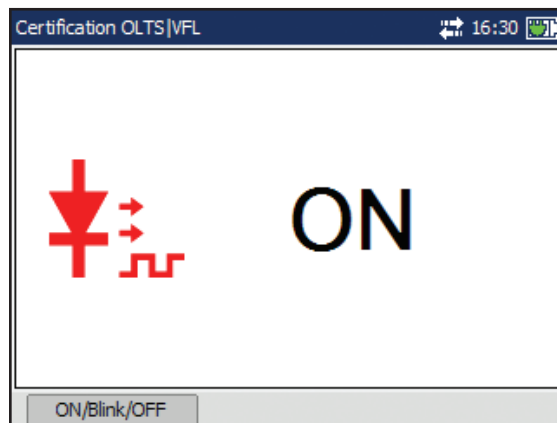
Clean connector.



AXS-200/350 with FIP-400.

Facilitating troubleshooting

Troubleshoot link problems such as bad splices, macrobendings 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 tests polarity. With this valuable and cost-efficient 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. Among its numerous features, this software's pass/fail thresholds, which are active during download, are automatically activated and displayed in the Report Viewer. It also enables you to produce professional-looking reports with detailed documentation.

Fiber ID	Wavelength (nm)	Power (dB)	Reference (dBm)	Threshold (dB)	Pass/Fail
0001	1310	-3.22	4.92	-5.00	Pass
	1490	-2.51	0.40	-5.00	Pass
	1550	-2.44	1.55	-5.00	Pass

UNIT A: AXS-350 N° 336630
Triple Play

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
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

GENERAL SPECIFICATIONS

Module and platform 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 platform weight (with battery)	1.46 kg	(3.22 lb)
Temperature		
operating	-10 °C to 50 °C	(14 °F to 122 °F)
storage	-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

VFL

Emitter type	Laser
Wavelength (nm)	650
Output power (dBm) ⁱ	3

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

- At 23 °C ± 1 °C and with an FC connector.
- At 1550 nm, unless otherwise specified.
- Sensitivity defined as 6 x rms noise level.
- For calibrated wavelengths. Valid up to 5 dBm for AXS-200/352 and up to 15 dBm for AXS-200/352X.
- 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.
- 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.
- For power meter only.
- rms for FP lasers; and -3 dB width for LEDs (typical values for LEDs).
- After a 15-minute warm-up period, 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.
- Typical values in 62.5/125 μm fiber.

ORDERING INFORMATION

TK-AXS-350-2-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

VFL 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

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

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

Notes
a. Mandatory with FP4D or FP4S.

EXFO Corporate Headquarters > 400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA Tel.: +1 418 683-0211 Fax: +1 418 683-2170 info@EXFO.com				
			Toll-free: +1 800 663-3936 (USA and Canada) www.EXFO.com	
EXFO America	3701 Plano Parkway, Suite 160	Plano, TX 75075 USA	Tel.: +1 800 663-3936	Fax: +1 972 836-0164
EXFO Asia	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road	Beijing 100044 P. R. CHINA	Tel.: +86 (10) 6849 2738	Fax: +86 (10) 6849 2662
EXFO Europe	Omega Enterprise Park, Electron Way	Chandlers Ford, Hampshire S053 4SE ENGLAND	Tel.: +44 2380 246810	Fax: +44 2380 246801
EXFO Service Assurance	285 Mill Road	Chelmsford, MA 01824 USA	Tel.: +1 978 367-5600	Fax: +1 978 367-5700

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. **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.**

For the most recent version of this spec sheet, please go to the EXFO website at <http://www.EXFO.com/specs>

In case of discrepancy, the Web version takes precedence over any printed literature.

AXS-200

линия продуктов для сетей доступа – SharpTESTER

ТЕСТИРОВАНИЕ СЕТЕЙ ДОСТУПА



Новый авторитет в тестировании сетей доступа: создан для многоуровневого тестирования в оптических и медных линиях доступа

Простота и Эффективность

- Запуска и остановка теста одним нажатием
- Единый пользовательский интерфейс для всей серии модулей SharpTESTER
- Гибкая архитектура, позволяющая адаптироваться к постоянно изменяющимся требованиям пользователей
- Прочное всепогодное исполнение
- Легок в использовании даже для неопытных пользователей или незнакомых с конкретными применениями специалистов
- Быстрое и однозначное заключение по выполненному тесту по критерию «годен/негоден» предлагается пользователю на цветном графическом трансфлективном экране

Решение, позволяющее работать на множестве уровней и в различных средах — Серия из трех модулей

Тестирование медных линий/DSL/Сервисов «три-в-одном»

- Полная проверка абонентского кабеля
- Проверка качества сервисов (QoS), поставляемых с помощью xDSL подключений
- Тестирование Ethernet для проверки сервисов

Тестирование оптических линий

- Тестирование физического уровня волоконной линии доступа

Тестирование Ethernet

- Тестирование Ethernet линий при их инсталляции или в процессе обслуживания

Гибкость в подключении

- Легкая передача данных и обновление программного обеспечения с помощью USB подключения
- USB A/B и RJ-45
- Порт для подключения видеомикроскопа

ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ

Экран	89 мм (3.5 in) LCD, 320 x 240, QVGA, TFT
Интерфейсы	USB хост/клиент, RJ-45 Ethernet 10/100, порт видеомикроскопа
Память	Внутренняя: 512 МБ; USB: 1 Гб, 2 Гб и больше
Аккумулятор	Перезаряжаемый Li-Ion аккумулятор
Источник питания	15-24 В, пост тока, 40 Вт минимум

ОБЩИЕ ХАРАКТЕРИСТИКИ

Температура		
Работы	от - 10 °C до 50 °C	(от 14 °F до 122 °F)
хранения ^а	от - 40 °C до 70 °C	(от -40 °F до 158 °F)
Размер (В x Ш x Г)	241.3 мм x 109.2 мм x 38.1 мм	(9 1/2 in x 4 5/16 in x 1 1/2 in)
Вес	0.468 кг	(1.02 lb)
Относительная влажность	от 0 % до 93 % без конденсата	
Гарантия	1 год	

Примечание

а. Максимальная температура для внутреннего аккумулятора 60 °C (140 °F).

АКССЕСУАРЫ

GP-10-061	Мягкая сумка
GP-10-072	Полужесткая сумка для переноски
GP-10-074	Жесткий кейс AXS-200
GP-2016	Кабель RJ-45 LAN (10 фт)
GP-2019	USB микродиск (1 Гб)

ИНФОРМАЦИЯ ДЛЯ ЗАКАЗА

AXS-200-XX-XX

Модель ■

AXS-200 = SharpTester

Видеомикроскоп ■

FP = Поддержка видеомикроскопа

FPS = Кабель подключения и головка видеомикроскопа 200х/400х

■ PSWO

00 = Без дополнительного ПО

FPS^а = ПО для видеомикроскопа

Примечание

а. Обязательно с FPS.

Пример: AXS-200-FPS-FPS

Центральный офис EXFO > 400 Godin Avenue, Quebec City (Quebec) G1M 2K2 CANADA | Тел.: 1 418 683-0211 | Факс: 1 418 683-2170 | info@EXFO.com

Бесплатный тел.: 1 800 663-3936 (США и Канада) | www.EXFO.com

EXFO Америка	3701 Plano Parkway, Suite 160 Plano, TX 75075 USA	Тел.: 1 800 663-3936	Факс: 1 972 836-0164
EXFO Европа	Omega Enterprise Park, Electron Way Chandlers Ford, Hampshire S053 4SE ENGLAND	Тел.: +44 2380 246810	Факс: +44 2380 246801
EXFO Азия	151 Chin Swee Road, #03-29 Manhattan House SINGAPORE 169876	Тел.: +65 6333 8241	Факс: +65 6333 8242
EXFO Китай	No.88 Fuhua, First Road, Central Tower, Room 801 Futian District Shenzhen 518048, CHINA	Тел.: +86 (755) 8203 2300	Факс: +86 (755) 8203 2306
	Beijing New Century Hotel Office Tower, Room 1754-1755 No. 6 Southern Capital Gym Road Beijing 100044 P. R. CHINA	Тел.: +86 (10) 6849 2738	Факс: +86 (10) 6849 2662

Компания EXFO сертифицирована по стандарту ISO 9001 и, соответственно, аттестует качество своих продуктов. Данный прибор согласуется с частью 15 правил FCC. Работа с прибором подчиняется следующим двум условиям: (1) данное изделие не может вызывать вредных помех и (2) данное изделие может принимать любую помеху, включая помеху, которая может оказать нежелательное воздействие на работу. Компания EXFO предприняла все меры, для того, чтобы удостовериться, что информация, содержащаяся в данной спецификации, является точной. Вся выпускаемая компанией EXFO продукция соответствует директиве WEEE Европейского Союза. За дополнительной информацией обратитесь по адресу www.EXFO.com/recycle. Однако, мы не несем ответственности за любые ошибки или недочеты, и мы оставляем за собой право на изменения дизайна, характеристик и продуктов в любое время без каких-либо обязательств. Единицы измерения в этом документе соответствуют стандартам SI и общепринятой практике. Свяжитесь с EXFO для получения информации о ценах и наличии продуктов или для получения телефонного номера дистрибьютора в вашем регионе.

За наиболее свежей версией данной спецификации, пожалуйста, посетите сайт компании EXFO по адресу <http://www.EXFO.com/specs>

В случае разногласий, версия, опубликованная на сайте, имеет преимущество перед любой печатной литературой.