

AXS-115 handheld OTDR

POINT-TO-POINT (P2P) LINKS, ACCESS
AND FTTx NETWORK INSTALLATION
AND TROUBLESHOOTING

- Ultra-portable and fit-for-purpose, the AXS-115 brings the essential capabilities of a state-of-the-art OTDR in a sleek design to the field.



KEY FEATURES

Rugged and ultra-portable, featuring a 4-inch high-visibility outdoor touchscreen

All-day battery autonomy

Dynamic range of 32/30 dB

Short dead zones: 0.8/3.5 m event dead zone (EDZ) / attenuation dead zone (ADZ)

Onboard link map simplifying OTDR trace interpretation

Dual wavelengths with automated macrobend detection

In-line power checker and source

Onboard PDF reporting

APPLICATIONS

FTTx network installation and troubleshooting

Access network characterization

Cable television (CATV), hybrid fiber-coaxial (HFC) network testing

FTTA, distributed antenna systems (DAS) installation

ACCESSORIES (OPTIONAL)



Test cord box
TCB-SM-SCX-XXX-XX



Small size soft carrying case
GP-10-061



Hands-free glove
GP-3186



AXS OTDR soft pouch
GP-3151



3-in-1 accessory
GP-3172

PORTRAIT AND LANDSCAPE VIEW

Landscape view available at the click of a button:

- Investigate the trace efficiently
- Manual measurements with two markers
- Zoom on elements



SPECIFICATIONS^a

TECHNICAL SPECIFICATIONS

Wavelength (nm) ^b	1310 ± 30/1550 ± 30
Dynamic range (dB) ^c	32/30
Event dead zone (m) ^d	0.8
Attenuation dead zone (m) ^d	3.5
Distance range (km)	0.065 to 200
Pulse width (ns)	3 to 20 000
Linearity (dB/dB)	±0.05
Loss threshold resolution (dB)	0.01
Loss resolution (dB)	0.001
Sampling resolution (m)	0.04 to 5
Sampling points	Up to 256 000
Distance uncertainty (m) ^e	±(0.75 + 0.0025% × distance + sampling resolution)
Reflectance accuracy (dB) ^b	±2

GENERAL SPECIFICATIONS

Size (H × W × D)	171 mm × 93 mm × 48 mm (6 3/4 in × 3 11/16 in × 1 7/8 in)
Weight (with battery)	0.5 kg (1.1 lb)
Display	4 in (101.6 mm) touchscreen, 800 × 480 TFT, portrait and landscape view
Interfaces	One USB-C port
Storage	8 GB internal memory (10 000 OTDR traces, typical)
Results format	PDF report on the unit .sor trace as per Telcordia (Bellcore)
Battery	Rechargeable lithium-polymer battery, USB type-C charging port connector
Battery autonomy	>10 hours of operation as per Telcordia (Bellcore) TR-NWT-001138
Temperature	Operating: -10 °C to 45 °C (14 °F to 113 °F) Storage: -40 °C to 70 °C (-40 °F to 158 °F) ^f
Relative humidity	< 93 % non-condensing
Data management	FastReporter 3
Adapters	Multiple changeable adapters to fit any optical connectors: SC, FC, LC, and more

IN-LINE SOURCE

Output power (dBm) ^g	-7
Modulation	1 kHz + Blink, 2 kHz + Blink

LASER SAFETY



Complies in China and India

a. All specifications valid at 23 °C ± 2 °C with an FC/APC connector, unless otherwise specified.

b. Typical.

c. Typical dynamic range with longest pulse and three-minute averaging at SNR = 1.

d. Typical, for reflectance from -55 dB, using a 3-ns pulse.

e. Does not include uncertainty due to fiber index.

f. -20 °C to 60 °C (-4 °F to 140 °F) with the battery pack. To preserve optimal battery performance, do not expose to high storage temperatures for extended periods of time.

g. Typical output power is given at 1550 nm.

IN-LINE POWER CHECKER ^{a, b}

Power range (dBm)	–60 to 23
Power uncertainty (dB) ^{c, d}	±0.5
Calibrated wavelengths (nm)	1310, 1490, 1550, 1625, 1650
Selectable wavelengths (nm)	1310, 1490, 1550, 1577, 1625, 1650
Tone detection	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz, 1 kHz + Blink, 2 kHz + Blink

ACCESSORIES (optional)

GP-3151	AXS OTDR soft pouch	GP-3150	Rechargeable battery
GP-10-061	Small size soft carrying case	GP-3172	3-in-1 accessory combining kickstand, hand-strap and VFL holder (compatible with FLS-140)
GP-10-071	Medium size soft carrying case	GP-2227	USB AC adapter (includes interchangeable plugs for North America, Europe, UK and Australia)
GP-3157	Wrist strap	GP-2269	USB-A to USB-C cable (for charging purposes and data transfer)
GP-3186	Hands-free glove		

a. Typical.

b. Specifications valid when OTDR not in operation or in idle mode.

c. At calibrated wavelengths.

d. Requires a good entry connector's health.

ORDERING INFORMATION

AXS-115-XX-XX-XX

Optical configuration ^a

SM1 = OTDR, 1310/1550 nm

Connector

EA-EUI-28 = APC/DIN 47256

EA-EUI-89 = APC/FC narrow key

EA-EUI-91 = APC/SC

EA-EUI-95 = APC/E-2000

EA-EUI-98 = APC/LC

EI connectors = See section below

Options

00 = No accessory

GP-3151 = AXS OTDR soft pouch

Example: AXS-115-SM1-EA-EUI-91

a. Only available and certified in China and India.

EI CONNECTORS



To maximize the performance of your OTDR, EXFO recommends using APC connectors on singlemode port. These connectors generate lower reflectance, which is a critical parameter that affects performance, particularly in dead zones. APC connectors provide better performance than UPC connectors, thereby improving testing efficiency.

Note: UPC connectors are also available. Simply replace EA-XX by EI-XX in the ordering part number. Additional connector available: EI-EUI-90 (UPC/ST).

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