

# AXS-100 Access OTDR

FTTX LAST-MILE AND POINT-TO-POINT TROUBLESHOOTING UNIT



A powerful handheld unit designed for singlemode OTDR troubleshooting and in-service PON troubleshooting.

SPEC SHEET

## KEY FEATURES

Wavelengths: 1310/1550/1625 nm

Dynamic range: 29/28/28 dB

In-service PON troubleshooting using 1625 nm port

Battery autonomy: 8 hours

## APPLICATIONS

FTTx last-mile in-service troubleshooting

Point-to-point link testing

CATV network testing

## COMPLEMENTARY PRODUCTS AND OPTIONS



Fiber Inspector Probe  
FIP-400



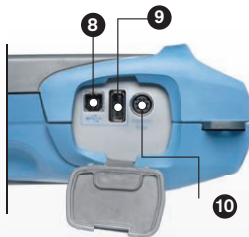
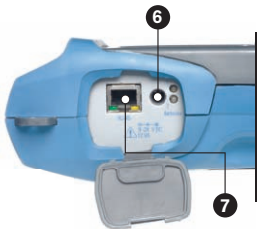
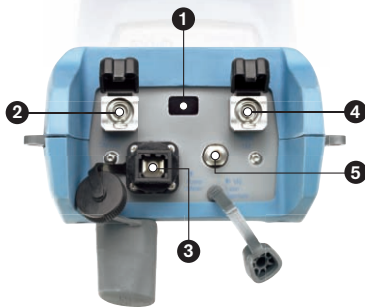
Data Post-Processing  
Software  
FastReporter



Soft Pulse Suppressor Bag  
SPSB



Assessing  
Next-Gen Networks



- 1 Infrared Printer Interface
- 2 OTDR Port | In-service singlemode testing.
- 3 Power Meter Detector Port | Compatible with almost every connector on the market. Manually and efficiently perform power and loss testing. Accurately measure power up to 26 dBm.
- 4 OTDR Port | Singlemode testing.
- 5 VFL Port | Built-in 650 nm visual fault location on a universal 2.5 mm connector.
- 6 AC Adapter
- 7 RJ-45 | TCP/IP testing.
- 8 USB B | Data transfer using ActiveSync or remote control.
- 9 USB A | Data transfer using memory stick.
- 10 Fiber Inspection Probe Port

### TECHNICAL SPECIFICATIONS<sup>a</sup>

Wavelengths (nm)	1310/1550/1625
Dynamic range <sup>b</sup> (dB)	29/28/28 (1310/1550/1625 nm)
Pulse width (ns)	10, 30, 100, 275, 1000, 2500, 10 000
Event dead zone <sup>c</sup> (m)	2.5
Attenuation dead zone <sup>c</sup> (m)	11/12/12
Linearity (dB/dB)	±0.05
Loss threshold (dB)	0.05
Loss resolution (dB)	0.01
Sampling resolution (m)	0.16 to 5
Sampling points	Up to 30 000
Distance uncertainty <sup>d</sup> (m)	±(1 + 0.005 % x distance + sampling resolution)
Distance range (km)	0.65 to 160
Typical real-time refresh (Hz)	2
Memory capacity	500 traces
Measurement time	User-defined
Stable source output power <sup>e</sup> (dBm)	-11
Visual fault locator (optional)	Laser, 650 nm ± 10 nm CW typical P <sub>out</sub> of 1.4 mW open beam

### OPTIONAL POWER METER<sup>f</sup>

Calibrated wavelengths (nm)	850, 1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625
Power range (dBm)	26 to -64 (GeX 2 mm)
Uncertainty	±5 % ± 0.4 nW (up to 5 dBm)
Display resolution (dB)	0.01 (-54 dBm to P <sub>max</sub> ) 0.1 (-54 dBm to -64 dBm) 1 (-64 dBm to min)
Automatic offset nulling range <sup>g</sup>	Maximum power to -38 dBm
Tone detection (Hz)	270/1000/2000

### GENERAL SPECIFICATIONS

Size (H x W x D)	250 mm x 125 mm x 75 mm (9 <sup>7/8</sup> in x 4 <sup>15/16</sup> in x 3 in)
Weight	1 kg (2.2 lb)
Temperature	operating -18 °C to 50 °C (14 °F to 122 °F) storage -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0 % to 95 % non-condensing
Power	Li-ion batteries; 8 hours of continuous operation as per Bellcore TR-NWT-001138
Warranty (years)	1

### LASER SAFETY



21 CFR 1040.10 AND IEC 60825-1:2007  
CLASS 1M WITHOUT VFL OPTION  
CLASS 3R WITH VFL OPTION

#### Notes

- a. All specifications valid at 23 °C ± 2 °C (73.4 °F ± 3.6 °F) with an FC/PC connector, unless otherwise specified.
- b. Typical dynamic range with longest pulse and three-minute averaging at SNR = 1.
- c. Typical dead zone for reflectance below -45 dB, using shortest pulse.
- d. Does not include uncertainty due to fiber index.
- e. Typical output power is given at 1550 nm.
- f. At 23 °C ± 1 °C, 1550 nm and with FC connector. With OTDR in idle mode, battery operated.
- g. For ±0.05 dB, from 18 °C to 28 °C.

**ORDERING INFORMATION**

**AXS-100-XX-XX-XX-XX-XX-XX-XX-XX-XX**

**Model <sup>a</sup>**

- AXS-100-003B = Access OTDR 1550 nm
- AXS-100-023B = Access OTDR 1310/1550 nm
- AXS-100-034B = Access OTDR 1550/1625 nm
- AXS-100-000 = None

**Connector <sup>a</sup>**

- 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-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

**Second port <sup>b</sup>**

- 00 = None
- 04B = Filtered 1625 nm

**Second connector <sup>a</sup>**

- 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-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

**Software summary kit**

- SK1 = SmartKit including macrobending detection, pass/fail and fault finder
- SK2 = IP testing
- SK3 = Fiber inspection probe software <sup>c</sup>

**Probe option**

- 00 = Without probe
- FP4S = Inspection probe (400x)
- FP4D = Inspection probe (200x/400x)

**VFL**

- 00 = Without visual fault locator
- VFL = With visual fault locator

**Connector adapter**

- FOA-12 = Biconic
- FOA-14 = D4, D4/PC
- FOA-16 = SMA/906
- FOA-22 = FC, FC (PC/SPC/UPC/APC), NEC-D3
- FOA-28 = DIN 47256 (LSA): DIN 47256 (PC/APC)
- FOA-32 = ST, ST (PC/SPC/UPC)
- FOA-54 = SC (PC/SPC/UPC/APC)
- FOA-78 = Radiall EC
- FOA-96B = E-2000/APC
- FOA-98 = LC
- FOA-99 = MU

**Power meter**

- 00 = Without power meter
- PM2X = With GeX power meter

Example: AXS-100-023B-EI-EUI-89-04B-EA-EUI-91-PM2X-FOA-22-VFL-FP4S-SK1-SK2-SK3

**Notes**

- a. Please refer to the example above. First select the singlemode connector, and then the live port connector.
- b. Not available with AXS-100-034B.
- c. Mandatory with FP4S or FP4D.

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