



The Choice Solution for Network-Link Certification

- Pass/fail thresholds and LED indicator
- Memory capacity of 1000 data items; data transfer to a PC via USB connection
- Error-free testing: automatic wavelength recognition, and no offset nulling required
- Visual fault locator (VFL) option for quick and easy troubleshooting

The FiberBasix 500 series includes three highly convenient instruments:

- The **EOT-500 Optical Loss Test Set**, a versatile instrument that combines a power meter and a light source
- The **ELS-500 Light Source**, combining up to four wavelengths and available in four specific configurations
- The **EPM-500 Power Meter**, which offers high accuracy and referencing capabilities

Rugged, Reliable, Convenient

Like all EXFO portable instruments, FiberBasix 500 handhelds are built for top ruggedness and convenience, perfect for the harshest test conditions. They feature a keypad/LCD backlight, for easy operation in darker environments, rechargeable batteries and interchangeable connectors.

FTTx Ready

EXFO's FiberBasix testers allow for the testing of passive optical networks (PONs) at 1310, 1490 and 1550 nm, the three wavelengths recommended by the ITU-T (G.983.3) for PONs.



ELS-500 Light Source: Multiwavelength Capability

The EXFO's ELS-500 Light Source provides excellent stability and high measurement accuracy for up to three singlemode wavelengths (1310, 1550 or 1490) on a single port, or four wavelengths (850/1300 nm and 1310/1550 nm) on two ports. It is the perfect complement to the EPM-500 Power Meter when it comes to measuring attenuation on fiber-optic links.

- Tone generation for use with the EPM-500 Power Meter
- Remote power referencing
- Highest singlemode output power in the industry
- Optional VFL



The ELS-500 Light Source

EOT-500 OLTS: Integrating a Power Meter and a Multiwavelength Light Source

The EOT-500 Optical Loss Test Set delivers power meter functionalities and your choice of up to three wavelengths from the following: 850, 1300, 1310, 1490 or 1550 nm. Thanks to its highly flexible design, you can simultaneously measure the attenuation on two fiber links using two units.

- Ideal for bidirectional testing
- Automatic wavelength recognition
- Optional VFL



The EOT-500 OLTS

EPM-500 Power Meter: High Accuracy and Easy Referencing

The EPM-500 Power Meter provides highly accurate power measurements, as well as reference value setting capabilities. What's more, this convenient unit requires no offset nulling, for reliable, long-lasting performance in the field.

- Tone detection, and automatic wavelength recognition
- Memory capacity of 1000 data items; data transfer to a PC via USB connection
- Pass/Fail thresholds and LED indicators
- Optional VFL



The EPM-500 Power Meter

ELS-500 SPECIFICATIONS¹

Model ²	12D	23BL	235BL	01-VCL
Central wavelength (nm)	850 ± 25 1300 +50/-10	1310 ± 20 1550 ± 20	1310 ± 20 1490 ± 10 1550 ± 20	850 ± 20
Spectral width ³ (nm)	50/135	≤ 5	≤ 5	≤ 1
Output power (dBm)	≥ -18/≥ -18 (62.5/125 μm)	≥ 1/≥ 1	≥ 1/≥ -4.5/≥ -3	≥ -3 (50/125 μm)
Automatic wavelength recognition	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	60
Warranty and recommended calibration interval (year)	1	1	1	1

EOT-500 SPECIFICATIONS¹

Model	EOT-502	EOT-502X	GENERAL SPECIFICATIONS	
Detector⁴	Ge	GeX	Size (H x W x D)	19.0 cm x 10.0 cm x 6.2 cm (7 1/2 in x 4 in x 2 1/2 in)
Power range ⁵ (dBm)	10 to -70	26 to -55	Weight	0.48 kg (1.1 lb)
Wavelength range (nm)	800 to 1650	800 to 1650	Temperature operating	-10 °C to 50 °C (14 °F to 122 °F)
Number of calibrated wavelengths	6	6	storage	-40 °C to 70 °C (-40 °F to 158 °F)
Power uncertainty ⁶	± 5 % ± 0.1 nW	± 5 % ± 3 nW	Relative humidity	0 % to 95 % non-condensing
Automatic offset nulling ⁷	Yes	Yes	STANDARD ACCESSORIES	
Display units	dB, dBm, W	dB, dBm, W	User guide, Certificate of Calibration, instrument stickers in six languages, AC adapter/charger, lithium ion battery, shoulder strap, alcohol cleaning pads, soft carrying case.	
Tone detection	270 Hz, 1 kHz and 2 kHz	270 Hz, 1 kHz and 2 kHz		
Automatic wavelength recognition ⁸	Yes	Yes		
Warm-up period ⁹ (min)	0	0		
Data storage (items)	more than 1000	more than 1000		
Battery life (hours) (typical)	70	70		
Warranty and recommended calibration period (year)	1	1		

Model ²	12D	23BL	235BL	01-VCL
Central wavelength (nm)	850 ± 25 1300 +50/-10	1310 ± 20 1550 ± 20	1310 ± 20 1490 ± 10 1550 ± 20	850 ± 20
Spectral width ³ (nm)	50/135	≤ 5	≤ 5	≤ 1
Output power (dBm)	≥ -18 (62.5/125 μm) ≥ -18 (62.5/125 μm)	≥ 1	≥ 1 ≥ -4.5 ≥ -3	≥ -3 (50/125 μm)
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
Automatic wavelength recognition	Yes	Yes	Yes	Yes
Battery life (hours) (typical in Auto mode)	50	50	50	60
Warranty and recommended calibration period (years)	1	1	1	1

EPM-500 SPECIFICATIONS¹

Model	EPM-502	EPM-502X
Detector⁴	Ge	GeX
Power range ⁵ (dBm)	10 to -70	26 to -55
Wavelength range (nm)	800 to 1650	800 to 1650
Number of calibrated wavelengths	6	6
Power uncertainty ⁶	± 5 % ± 0.1 nW	± 5 % ± 3 nW
Automatic offset nulling ⁷	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
Automatic wavelength recognition ⁸	Yes	Yes
Warm-up period ⁹ (min)	0	0
Data storage (items)	up to 1000	up to 1000
Battery life (hours) (typical)	70	70
Warranty and recommended recalibration interval (years)	1	1

VFL Option Specifications¹⁰

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

Notes

1. Guaranteed unless otherwise specified.
2. All specifications valid at 23 °C ± 1 °C, with an FC connector.
3. rms for FP lasers and VCSEL; -3 dB width for LEDs (typical values for LEDs and VCSEL).
4. All specifications valid at 1550 nm and 23 °C ± 1 °C, with an FC connector.
5. In CW mode; sensitivity defined as 6 x rms noise level.
6. For calibration wavelengths. Valid up to 20 dBm for EOT/EPM-502X.
7. For power > -40 dBm for EOT/EPM-502, and > -25 dBm for EOT/EPM-502X.
8. At 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm; for power > -50 dBm for EOT-502/EPM-502, and > -40 dBm (typical) for EOT/EPM-502X.
9. For a variation of ≤ 0.06 dB at power levels ≥ -40 dBm for EOT/EPM-502 and ≥ -25 dBm for EOT/EPM-502X.
10. Typical values for 62.5/125 μm fiber.

