ELS-100
Light Source

EPM-100
Power Meter

NETWORK TESTING–OPTICAL

- Cost-effective, rugged handheld instruments designed for reliable performance
- Easy-to-use interface for error-free testing
- Interchangeable connectors, for first-class flexibility
- Particularly suited to the testing and troubleshooting of fiber-optic networks located within the premises

Introducing EXFO's FiberBasix testers, a series of handheld instruments designed to meet your basic day-to-day test requirements, while helping you stay within budget. These worry-free, straightforward solutions provide the tools you need to accurately measure signal attenuation during fiber-optic cable installation.

The FiberBasix 100 Series includes two highly convenient instruments:

- The **ELS-100 Light Source**, combining up to four wavelengths and available in four specific configurations
- The **EPM-100 Power Meter**, which offers high accuracy and referencing capabilities

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-100 Light Source: Multiwavelength Capability

EXFO's ELS-100 Light Source provides excellent stability and high measurement accuracy for up to three singlemode wavelengths or two multimode wavelengths. It is the perfect complement to the FiberBasix EPM-100 Power Meter when it comes to measuring attenuation on fiber-optic links.

The ELS-100 Light Source

EPM-100 Power Meter: High Accuracy and Easy Referencing

The EPM-100 Power Meter provides highly accurate power measurements, as well as reference value setting capabilities. What's more, this convenient unit requires no offset nulling, and it offers power autonomy of 300 hours, for reliable, long-lasting performance in the field.

The EPM-100 Power Meter

ELS-100 SPECIFICATIONS [a]

Model [b]	23BL	12D
Central wavelength (nm)	1310 ± 20 1550 ± 20	850 ± 25 1300 +50/–10
Spectral width [c] (nm)	≤ 5	50/135
Output power (dBm)	≥ 1/≥ 1	≥ –20/≥ –20 (62.5/125 µm)
Power stability [d] (dB) 8 hours	± 0.10	± 0.10
Battery life (hours) (typical)	50	55
Warranty and recommended calibration interval (years)	1	1

EPM-100 SPECIFICATIONS [a]

Model [e]	EPM-102	EPM-102X
Power meter port	**Ge**	**GeX**
Power range [f] (dBm)	10 to –60	26 to –50
Range displayed (dBm)	Down to –65	Down to –50
Number of calibrated wavelengths [g]	6	6
Power uncertainty [h]	±5 % ± 1 nW	±5 % ± 10 nW
Resolution (dB)	0.01 [i]	0.01 [j]
Automatic offset nulling	Yes	Yes
Warm-up time [f] (s)	0	0
Display units	dB/dBm/W	dB/dBm/W
Screen refresh rate (Hz)	3	3
Battery life (hours) (typical)	> 300	> 300
Warranty and recommended calibration interval (years)	1	1

Notes

a. Guaranteed unless otherwise specified.

b. All specifications valid at 23 °C ± 1 °C, with an FC connector.

c. rms for lasers and FWHM for LEDs; typical values for LEDs.

d. After 15 minutes warm-up; expressed as ± half the difference between the maximum and minimum values measured during the period, with an APC connector on the power meter.

e. All specifications valid at 1550 nm and 23 °C ± 1 °C, with an FC connector.

f. In CW mode, sensitivity defined as 6x rms noise level.

g. Wavelengths: 850 nmm, 1300 nm, 1310 nm, 1490 nm, 1550 nm and 1625 nm.

h. Traceable to national standards.

i. From 10 dBm to –50 dBm.

j. From 26 dBm to –35 dBm.

GENERAL SPECIFICATIONS

Size (H x W x D)	185 mm x 100 mm x 55 mm	(7 1/4 in x 4 in x 2 1/8 in)
Weight	0.4 kg	(0.9 lb)
Temperature		
operating	–10 °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	

STANDARD ACCESSORIES

User guide, Certificate of Calibration, instrument stickers in four languages, AC adapter, EUI-XX (ELS), connector adapter (FOA-XX) (EPM), three AA batteries, wrist strap, alcohol cleaning pads.

SAFETY

21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001:
ELS-500: CLASS 1 LASER PRODUCT

ORDERING INFORMATION

ELS-100-XX-XX

Model
ELS-100-12D = 850/1300 nm LED (62.5/125 mm)
ELS-100-23BL = 1310/1550 nm laser (9/125 mm)
ELS-100-12D-23BL = 850/1300 nm LED (62.5/125 mm), 1310/1550 nm laser (9/125 mm)

Example: ELS-100-12D-23BL-EI-EUI-89

Connector [a]
EI-EUI-89 = UPC/FC narrow key [b]
EI-EUI-90 = UPC/ST [b]
EI-EUI-91 = UPC/SC [b]
EI-EUI-95 = UPC/E-2000 [b]

EPM-10X-XX

Model
EPM-102 = Ge detector
EPM-102X = High-power Ge detector

Example: EPM-102X-FOA-22

Connector Adapter [a]
FOA-22 = FC (PC/SPC/UPC/APC), NEC-D3
FOA-32 = ST (PC/SPC/UPC)
FOA-54 = SC
FOA-96B = E-2000
FOA-98 = LC

Notes

a. Other connectors and connector adapters available.
Consult our website at www.EXFO.com/accessories for details.

b. Interchangeable connection.

TEST KIT ORDERING INFORMATION

FBK-101-XX LAN Test Kit
- EPM-102-XX Power Meter, Ge detector
- ELS-100-12D-XX Light Source, 850/1300 nm LED (1 port)
- One TJ-DXX-XX test jumper
- Carrying case GP-10-061

FBK-102-XX Outside Plant Test Kit
- EPM-102-XX Power Meter, Ge detector
- ELS-100-23BL-XX Light Source, 1310/1550 nm laser (1 port)
- One TJ-BXX-XX test jumper
- Carrying case GP-10-061

FBK-103-XX Contractor Test Kit
- EPM-102-XX Power Meter, Ge detector
- ELS-100-12D-23BL-XX Light Source, 850/1300 nm LED and 1310/1550 nm laser (2 ports)
- One TJ-BXX-XX test jumper
- One TJ-DXX-XX test jumper
- Carrying case GP-10-061

FBK-105-XX CATV Test Kit
- EPM-102X-XX Power Meter, high-power Ge detector
- ELS-100-23BL-XX Light Source, 1310/1550 nm laser (1 port)
- One TJ-BXX-XX test jumper
- Carrying case GP-10-061

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