FiberBasix 50 Handheld Testers

SERIES COMPRISING THE ELS-50 LIGHT SOURCE AND EPM-50 POWER METER

Delivering simple, accurate measurement of signal attenuation during fiber-optic cable installation.

KEY FEATURES
- Easy-to-use interface for error-free testing
- Interchangeable connectors, for first-class flexibility
- Cost-effective, rugged and highly reliable
- Ideal for testing and troubleshooting optical premises networks
- Available as stand-alone units or in all-in-one test kits including all required accessories (adapters, carrying case, etc.)
- Five test kits designed for specific users/testing needs: LAN, outside plant, contractors, FTTH and CATV

APPLICATIONS
- Link-loss characterization (ELS-50 Light Source)
- Power measurement (EPM-50 Power Meter)

COMPLEMENTARY PRODUCTS
- Fiber Inspector Probe FIP-400B (WiFi or USB)
- Visual Fault Locator FLS-140
EXFO's FiberBasix 50 series meets your basic day-to-day test requirements while helping you stay within budget. These worry-free, straightforward handheld testers enable accurate measurement of signal attenuation during fiber-optic cable installation. The FiberBasix 50 series includes two highly convenient instruments:
› The ELS-50 Light Source, which offers up to three wavelengths for singlemode testing and two wavelengths for multimode testing
› The EPM-50 Power Meter, which offers high accuracy and referencing capabilities

**ELS-50 LIGHT SOURCE: MULTIWAVELENGTH CAPABILITY**
EXFO’s ELS-50 Light Source provides excellent stability and high measurement accuracy for up to three singlemode wavelengths (1310, 1490 and 1550 nm) or two multimode wavelengths (850 and 1300 nm). It is the perfect complement to the FiberBasix 50 EPM-50 Power Meter when it comes to measuring attenuation on fiber-optic links.

**EPM-50 POWER METER: HIGH ACCURACY AND EASY REFERENCING**
The EPM-50 Power Meter provides highly accurate power measurements, as well as reference value setting capabilities. It offers power autonomy of 300 hours, for reliable, long-lasting performance in the field.
**ELS-50 SPECIFICATIONS**

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>23BL</th>
<th>235BL</th>
<th>12C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central wavelength (nm)</td>
<td>1310 ± 20</td>
<td>1310 ± 20</td>
<td>850 ± 25</td>
</tr>
<tr>
<td></td>
<td>1550 ± 20</td>
<td>1490 ± 10</td>
<td>1300 ±50/±20</td>
</tr>
<tr>
<td></td>
<td>1550 ± 20</td>
<td></td>
<td></td>
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<tr>
<td>Spectral width (nm)</td>
<td>≤5</td>
<td>≤5</td>
<td>±0.10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥40/120</td>
<td></td>
</tr>
<tr>
<td>Output power (dBm)</td>
<td>≥–5</td>
<td>≥–5</td>
<td>≥–24</td>
</tr>
<tr>
<td></td>
<td>(50/125 μm)</td>
<td>(50/125 μm)</td>
<td></td>
</tr>
<tr>
<td>Power stability (dB)</td>
<td>±0.10</td>
<td>±0.10</td>
<td>±0.10</td>
</tr>
<tr>
<td>Battery life (hours)</td>
<td>60</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>Tone generation (Hz)</td>
<td>270, 1 k, 2 k</td>
<td>270, 1 k, 2 k</td>
<td>270, 1 k, 2 k</td>
</tr>
<tr>
<td>Warranty (year)</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**GENERAL SPECIFICATIONS**

- Size (H x W x D): 189 mm x 78 mm x 37 mm (7 7/16 in x 3 1/16 in x 1 7/16 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**

- Soft pouch, LSA-89 FC connector adapter, quick reference sticker in five languages, Certificate of Compliance, three AA batteries, rubber boot protector

**OPTIONAL ACCESSORIES**

- LSA-89 (FC connector adapter for ELS-50 Light Source)
- LSA-90 (ST connector adapter for ELS-50 Light Source)
- LSA-91 (SC connector adapter for ELS-50 Light Source)
- Manual (User guide)
- GP-10-081 (soft pouch)
- GP-2124 (rubber protective boot)
- GP-2131 (pack of 10 replacement ceramic sleeves for ELS-50)

**SAFETY**

- CLASS 1 LASER PRODUCT

**Notes**

- All specifications valid at 23 °C ± 3 °C, with an FC/UPC connector.
- Typical.
- Rms for lasers and −3 dB width for LEDs.
- After 15 minutes warmup; expressed as ± half the difference between the maximum and minimum values measured over 8 hours.
EPM-50 SPECIFICATIONS

Notes
a. All specifications valid at 23 °C ± 3 °C, with an FC/UPC connector.
b. In CW mode.
c. Wavelengths: 850 nm, 1300 nm, 1310 nm, 1490 nm, 1550 nm.
d. Typical.

SPECIFICATIONS*

<table>
<thead>
<tr>
<th>Model</th>
<th>EPM-53</th>
<th>EPM-53X</th>
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</thead>
<tbody>
<tr>
<td>Power meter port</td>
<td>InGaAs</td>
<td>InGaAsX</td>
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<tr>
<td>Power range (dBm) b</td>
<td>10 to –60</td>
<td>26 to –50</td>
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<tr>
<td>Number of calibrated wavelengths c</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Power uncertainty d</td>
<td>±5 %</td>
<td>±5 %</td>
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<tr>
<td>Resolution (dB)</td>
<td>0.01</td>
<td>0.01</td>
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<tr>
<td>Display units</td>
<td>dB/dBm/W</td>
<td>dB/dBm/W</td>
</tr>
<tr>
<td>Tone detection (Hz)</td>
<td>270, 1 k, 2 k</td>
<td>270, 1 k, 2 k</td>
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<tr>
<td>Battery life (hours) d</td>
<td>&gt;300</td>
<td>&gt;300</td>
</tr>
<tr>
<td>Warranty (year)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

GENERAL SPECIFICATIONS

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|               | –40 °C to 70 °C (–40 °F to 158 °F) |
| Relative humidity | 0 % to 95 % non-condensing |

STANDARD ACCESSORIES

Soft pouch, PMA-22 FC connector adapter, quick reference sticker in five languages, Certificate of Calibration, Certificate of Compliance, three AA batteries

OPTIONAL ACCESSORIES

PMA-22 (FC connector adapter for EPM-50 power meter)
PMA-32 (ST connector adapter for EPM-50 power meter)
PMA-54 (SC connector adapter for EPM-50 power meter)
Manual (user guide)
GP-10-081 (soft pouch)
GP-2124 (rubber boot)

Rubber boot protector
Wrist strap
Cap protector
Stand
Soft pouch
Connector adapter
Carrying case (supplied with any all-in-one test kit)
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For the most recent version of this spec sheet, please go to www.EXFO.com/specs.

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