

# LTK-400 Series Optical Sources, Meters and Kits Without Data Storage Capabilities

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## Features and Benefits

**High output power and calibrated wavelengths**  
Easy to use, unparalleled performance

**Rugged handheld design**  
Capable of enduring harsh testing environments

**Product warranty and calibration interval**  
Reduced ownership cost

**Packaged as test kits**  
Test “right out of the box”

The Corning LTK-400 series offers a complete, cost-effective solution for link-loss testing of both multimode and single-mode systems for those users who do not require data storage capabilities. The LTK offers unparalleled performance by combining a source that has one of the highest output powers in the industry with a meter that has 10 calibrated wavelengths from 830 to 1625 nm. The automatic wavelength detection mode allows the power meter to automatically detect/switch to the wavelength being transmitted by the source and has automatic offset nulling under normal temperature and humidity conditions. Both the source and meter have field-interchangeable port adapters and can be powered by standard AA alkaline batteries or by the supplied AC power adapters. The rugged handheld design can withstand the harshest testing environments while the product warranty and recommended three-year calibration interval result in reduced ownership cost.

The LTK-400 series meter and sources are sold individually or packaged as test kits. These test kits include everything needed to test “right out of the box” including the following:

- OS-400 series source and OM-410 meter
- SC and ST® compatible source and meter adapters
- SC and ST compatible jumpers
- SC and ST compatible adapters
- 62.5 and 50 µm test mandrels
- Alkaline batteries and AC power supplies
- Cleaning supplies in a storage case
- Padded carrying case and user’s manual



**LTK-400 Series Light Source and Power Meter**  
| Photo LAN784



**LTK-400 Series Test Kit**  
| Photo LAN786

# LTK-400 Series Optical Sources, Meters and Kits Without Data Storage Capabilities



## Specifications |

| Model Number OM-410 Power Meter*                     |  |
|--|--|
| <b>Power Meter Port</b>                              | Ge   |
| <b>Power Range<sup>†</sup></b>                       | 10 to -60 dBm                              |
| <b>Number of Calibrated Wavelengths<sup>‡</sup></b>  | 10   |
| <b>Power Uncertainty<sup>§</sup></b>                 | ± 5 percent ± 1 nW                         |
| <b>Resolution<sup>**</sup></b>                       | 0.01 dB                                    |
| <b>Automatic Offset Nulling<sup>††</sup></b>         | Yes  |
| <b>Warmup Time<sup>‡‡</sup></b>                      | None                                       |
| <b>Display Units</b>                                 | dB/dBm/W                                   |
| <b>Automatic Wavelength Recognition<sup>§§</sup></b> | Yes  |
| <b>Screen Refresh Rate</b>                           | 3 Hz                                       |
| <b>Tone Detection</b>                                | 270 Hz, 1 kHz, 2 kHz                       |
| <b>Battery Life Typical</b>                          | 300 hours                                  |
| <b>Warranty and Calibration Interval</b>             | 3 years                                    |
| <b>Size (H x W x D)</b>                              | 18.5 x 10.0 x 5.5 cm (7.25 x 4 x 2.125 in) |
| <b>Weight</b>  | 0.4 kg (0.9 lb)                            |
| <b>Operating Temperature</b>                         | -10° to +50°C (+14° to +122°F )            |
| <b>Storage Temperature</b>                           | 40° to +70°C (-40° to +158°F)              |
| <b>Relative Humidity</b>                             | 0 to 95 percent, non-condensing            |

\*Specifications are 23°C ± 1°C.

†In CW mode; sensitivity defined as 6 x RMS noise level.

‡Wavelengths: 830, 850, 980, 1300, 1310, 1450, 1490, 1550, 1590 and 1625 nm.

§Traceable to NIST.

\*\*From 10 to -50 dBm.

††Power of > -40 dBm.

‡‡For ± 0.05 dB and temperatures of > 18°C.

§§At 850, 1300, 1310, 1490, 1550 and 1625 nm for power of > -50 dBm.

# LTK-400 Series Optical Sources, Meters and Kits Without Data Storage Capabilities

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## Specifications | (continued)

| LTK-400 Series Optical Source*    |  |  |
|-----------------------------------|--|--|
| Model Number                      | OS-403D<br>OS-4MDS                         | OS-404XD<br>OS-4MDS                    |
| Central Wavelengths               | 850 ± 25 nm<br>1300 -10/+50 nm             | 1310 ± 20 nm<br>1550 ± 20 nm           |
| Spectral Width <sup>†</sup>       | 50 nm (850 nm)<br>135 nm (1300 nm)         | ≤ 5 nm (1310 nm)<br>≤ 5 nm (1550 nm)   |
| Output Power <sup>‡</sup>         | ≥ -20 dBm (850 nm)<br>≥ -20 dBm (1300 nm)  | ≥ 1 dBm (1310 nm)<br>≥ 1 dBm (1550 nm) |
| Power Stability <sup>§</sup>      | ± 0.10 dB                                  | ± 0.10 dB                              |
| Battery Life <sup>**</sup>        | 120 hours                                  | 120 hours                              |
| Automatic Wavelength Recognition  | Yes  | Yes                                    |
| Tone Detection                    | 270 Hz, 1 kHz, 2 kHz                       | 270 Hz, 1 kHz, 2 kHz                   |
| Warranty and Calibration Interval | 3 years                                    | 3 years                                |
| Size (H x W x D)                  | 18.5 x 10.0 x 5.5 cm (7.25 x 4 x 2.125 in) |  |
| Weight                            | 0.4 kg (0.9 lb)                            |  |
| Operating Temperature             | -10° to +50°C (+14° to +122°F )            |  |
| Storage Temperature               | -40° to +70°C (-40° to +158°F)             |  |
| Relative Humidity                 | 0 to 95 percent, non-condensing            |  |
| Safety                            | Class 1M Laser Product                     |  |

\*Specifications are 23°C ± 1°C.

<sup>†</sup>RMS for lasers and -3 dB width for LEDs; typical values for LEDs.

<sup>‡</sup>LED output power is specified with 62.5 μm fiber. 50 μm coupled power would be lower.

<sup>§</sup>After 15 minutes warm-up; expressed as ± half the difference between the maximum and minimum values during the 8-hour period.

<sup>\*\*</sup>Typical autonomy in auto mode.

# LTK-400 Series Optical Sources, Meters and Kits Without Data Storage Capabilities

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## Ordering Information

| Power Meter |   |
|-------------|---|
| Part Number | Description   |
| OM-410      | Optical Power Meter without data storage; SC meter port adapter, ST® compatible meter port adapter, AC adapter, wrist strap, manual and AA alkaline batteries |

  

| Light Source |  |
|--------------|--|
| Part Number  | Description  |
| OS-403D      | Multimode Optical Source with 850/1300 nm LED; SC source port adapter, ST compatible source port adapter, AC adapter, wrist strap, manual and AA alkaline batteries                        |
| OS-404XD     | Single-mode Optical Source with 1310/1550 nm laser; SC source port adapter, ST compatible source port adapter, AC adapter, wrist strap, manual and AA alkaline batteries                   |
| OS-4MDS      | Quad Optical Source with 850/1300 nm LED and 1310/1550 nm laser; two SC source port adapters, ST compatible source port adapter, AC adapter, wrist strap, manual and AA alkaline batteries |

  

| Test Kits with Source and Meter |  |
|---------------------------------|--|
| Part Number                     | Description  |
| LTK-400MD                       | Multimode Loss Test Kit including OS-403D source (850/1300 nm LED) and OM-410 meter (no data storage), AA batteries for both units, two AC power supplies, SC and ST compatible jumpers and adapters for MM, manual, SC source port adapter, ST compatible source port adapter, SC meter port adapter, ST compatible meter port adapter, two wrist straps, plastic case of cleaning supplies and padded carrying case  |
| LTK-400SD                       | Single-Mode Loss Test Kit including OS-404XD source (1310/1550 nm laser) and OM-410 meter (no data storage), AA batteries for both units, two AC power supplies, SC and ST compatible jumpers and adapters for SM, manual, SC source port adapter, ST compatible source port adapter, SC meter port adapter, ST compatible meter port adapter, two wrist straps, plastic case of cleaning supplies and padded carrying case  |
| LTK-4MDS                        | Quad Multimode and Single-Mode Loss Test Kit including OS-4MDS (850/1300 nm LED) and (1310/1550 nm laser) source and OM-410 meter (no data storage), AA batteries for both units, two AC power supplies, SC and ST compatible jumpers and adapters for both MM and SM, manual, two SC source ports adapter, ST compatible source port adapter, SC meter port adapter, ST compatible meter port adapter, two wrist straps, plastic case of cleaning supplies and padded carrying case |

# LTK-400 Series Optical Sources, Meters and Kits Without Data Storage Capabilities

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## Accessories

| Part Number  | Product Description   | Units per Delivery |  |
|--------------|---|--------------------|--|
| UI-SC        | Test Kit Accessories, Universal Interface Source Connector Adapter, SC  | 1/1                |  |
| UI-ST        | Test Kit Accessories, Universal Interface Source Connector Adapter, ST® compatible  | 1/1                |  |
| UI-FC        | Test Kit Accessories, Universal Interface Source Connector Adapter, FC  | 1/1                |  |
| OA-SC        | Test Kit Accessories, Power Meter Connector Adapter, SC   | 1/1                |  |
| OA-ST        | Test Kit Accessories, Power Meter Connector Adapter, ST® compatible   | 1/1                |  |
| OA-FC        | Test Kit Accessories, Power Meter Connector Adapter, FC   | 1/1                |  |
| OA-LC        | Test Kit Accessories, Power Meter Connector Adapter, LC   | 1/1                |  |
| OA-MTRJ      | Test Kit Accessories, Power Meter Connector Adapter, MT-RJ  | 1/1                |  |
| PS-9-1       | Test Kit Accessories, AC Power Adapter for 400 series source or meter   | 1/1                |  |
| CASE-HH-400  | Test Kit Accessories, Hard-Shell Transit Case for two 400 series instruments and accessories (17.25 x 11.25 x 7 in; 8 lb) | 1/1                |  |
| CASE-STD-400 | Test Kit Accessories, Padded Carrying Case for two 400 series instruments and accessories                                 | 1/1                |  |
| OTS-COMBOMAN | Test Kit Accessories, Set of Mandrels for 50 and 62.5 µm multimode fiber  | 1/1                |  |

\* Note: Other test jumper kits (TJK) configurations are available. Please contact a Corning Customer Care Representative for more information.

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