

**5 YEAR WARRANTY**



OLS7 Optical Laser Source

## OLS Series Light Sources

### Features

- Rugged, dependable, tools backed with 5-Year Warranty
- Simple user interface minimizes training requirements
- Stabilized outputs for accurate loss measurements
- Wave ID supports testing up to three wavelengths simultaneously
- Field swappable output adapters provide flexibility

### Applications

- Link loss measurements
- Certify SM and MM links to industry standards
- Continuity check and fiber identification for maintenance restoration

With more than 25 years of experience in the optical testing industry and thousands of units in use around the world, AFL is a trusted supplier of optical light sources. Backed by 5-year product warranties, these are the quality products you can trust.

### Designed for use in outside plant environments

- Splash resistant controls
- Withstands one-meter drop test
- Controls designed for easy operation with gloves
- Field swappable output adapters allow access for cleaning optical port and supports multiple connector styles
- Efficient design provides long test time from globally available AA batteries. External power adapter available for extended testing or lab situations.

### Output Modes Supported

- Wave ID (Triple, Dual, or Single) decreases test time while reducing technician errors
- CW mode provides continuous output (no encoding)
- Test Tone (2000, 1000, 330, 270 Hz) for use in fiber identification with **NOYES®** brand power meters (with fiber end access) or **NOYES®** brand Optical Fiber Identifier (OFI) products for non-intrusive, mid-span testing

**5 YEAR WARRANTY**



OLS4 Optical Laser Source

## OLS Series Light Sources

### OLS Series Models and Applications

| MODEL     | MM / SM | WAVELENGTHS (nm)       | APPLICATIONS                               |
|-----------|---------|------------------------|--|
| OLS7-FTTx | SM      | 1310, 1490, 1625       | FTTH Networks                              |
| OLS7-FTTH | SM      | 1310, 1490, 1550       | FTTH Networks                              |
| OLS7-3    | SM      | 1310, 1550, 1625       | Telecom & CATV Networks                    |
| OLS4      | MM / SM | 850, 1300 / 1310, 1550 | Loss Testing of SM/MM networks             |
| OLS2-Dual | SM      | 1310, 1550             | SM Networks, LAN/WAN Testing               |
| OLS1-Dual | MM      | 850, 1300              | Ethernet, Token Ring, and FDDI Fiber Links |

### Specifications <sup>a</sup>

| OPTICAL SPECIFICATIONS: OLS7 MODELS                        |  |                 |  |                         |  |                  |   |                 |         |
|--|--|-----------------|--|-------------------------|--|------------------|---|-----------------|---------|
| MODEL  | OLS7-FTTx (Single Port)  |                 |  | OLS7-FTTH (Single Port) |  |                  | OLS7-3 (Single Port)                                |                 |         |
| Wavelength ( $\pm 20$ nm)                                  | 1310 nm  | 1490 nm         | 1625 nm  | 1310 nm                 | 1490 nm  | 1550 nm          | 1310 nm   | 1550 nm         | 1625 nm |
| Spectral Width   | 5 nm   | 3 nm            | 2 nm   | 5 nm                    | 3 nm   | 5 nm             | 5 nm  | 5 nm            | 2 nm    |
| Emitter Type   | Laser  |                 |  |                         |  |                  |   |                 |         |
| Safety Class   | Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03   |                 |  |                         |  |                  |   |                 |         |
| Output Power   | -5 dBm (typical), 9/125 fiber  |                 |  |                         |  |                  |   |                 |         |
| Output Stability   | $\pm 0.05$ dB over 1 hour (after 15 minutes warm-up)<br>$\pm 0.1$ dB over 8 hours (after 15 minutes warm-up) |                 |  |                         |  |                  |   |                 |         |
| Tone Output  | 270 Hz, 330 Hz, 1 kHz, 2 kHz   |                 |  |                         |  |                  |   |                 |         |
| OPTICAL SPECIFICATIONS: OLS4, OLS2-DUAL & OLS1-DUAL MODELS |  |                 |  |                         |  |                  |   |                 |         |
| MODEL  | OLS4 (MM Optical Port)   |                 | OLS4 (SM Optical Port)   |                         | OLS2-DUAL (Single Port)  |                  | OLS1-DUAL (Single Port <sup>b</sup> )               |                 |         |
| Wavelength   | 850 $\pm 30$ nm  | 1300 +30/-20 nm | 1310 $\pm 20$ nm   | 1550 $\pm 20$ nm        | 1310 $\pm 20$ nm   | 1550 $\pm 20$ nm | 850 $\pm 30$ nm                                     | 1300 +30/-20 nm |         |
| Spectral Width   | 45 nm (typ)  | 120 nm (typ)    | 5 nm (max)   | 5 nm (max)              | 5 nm (max)   |                  | 45 nm (typ)   | 120 nm (typ)    |         |
| Emitter Type   | LED  |                 | Laser  |                         | Laser  |                  | LED   |                 |         |
| Safety Class   | Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03   |                 |  |                         |  |                  |   |                 |         |
| Output Power   | >-20 dBm, 62.5 $\mu$ m multimode <sup>c</sup>  |                 | 0 dBm, 9 $\mu$ m single-mode   |                         | 0 dBm, 9 $\mu$ m single-mode <sup>d</sup>  |                  | >-20 dBm, 62.5 $\mu$ m multimode <sup>c</sup>       |                 |         |
| Output Stability   | $\pm 0.1$ dB over 8 hours (after 5 minutes warm-up)  |                 | $\pm 0.05$ dB over 1 hour (after 15 minutes warm-up)<br>$\pm 0.1$ dB over 8 hours (after 15 minutes warm-up) |                         | $\pm 0.05$ dB over 1 hour (after 15 minutes warm-up)<br>$\pm 0.1$ dB over 8 hours (after 15 minutes warm-up) |                  | $\pm 0.1$ dB over 8 hours (after 5 minutes warm-up) |                 |         |
| Tone Output  | N/A  |                 | 2 kHz  |                         | 270 Hz, 330 Hz, 1 kHz, 2 kHz   |                  | N/A   |                 |         |
| GENERAL SPECIFICATIONS: ALL OLS MODELS                     |  |                 |  |                         |  |                  |   |                 |         |
| Available Adapters   | SC FC, ST, LC  |                 |  |                         |  |                  |   |                 |         |
| Power  | 2 AA batteries, optional AC adapter  |                 |  |                         |  |                  |   |                 |         |
| Battery Life   | SM port: 72 hours typical (40 hours minimum). MM port: 30 hours typical (20 hours minimum)                   |                 |  |                         |  |                  |   |                 |         |
| Operating Temperature                                      | -10 °C to 50 °C, 90 % RH (non-condensing)  |                 |  |                         |  |                  |   |                 |         |
| Storage Temperature  | -30 °C to 60 °C, 90 % RH (non-condensing)  |                 |  |                         |  |                  |   |                 |         |
| Size (H x W x D)   | 14.0 x 8.1 x 3.8 cm (5.5 x 3.2 x 1.5 in)   |                 |  |                         |  |                  |   |                 |         |
| Weight   | 0.29 kg (0.65 lb)  |                 |  |                         |  |                  |   |                 |         |

#### Notes:

- All specifications valid at 25°C unless otherwise specified.
- May be used to test 50 or 62.5  $\mu$ m fiber with supplied mandrels.
- Output power will be approximately 3 dB less if a 50  $\mu$ m mandrel-wrapped jumper is used instead of a 62.5  $\mu$ m mandrel-wrapped jumper.
- Adjustable 2 dB.

## OLS Series Light Sources

### Ordering Information

When ordering, specify connector type at the end of model number (e.g. OLS2-DUAL-SC).

All OLS models include protective rubber boot, 2 AA batteries and carry case. AC adapters are available (ordered separately), see table below. Test jumpers and connector adapters are required for operation (purchased separately). Test jumpers with a variety of connector styles and fiber types and adapter caps for most common connectors may be purchased from AFL.

| AFL NO.   | OUTPUT WAVELENGTHS (nm) |      |      |      |      |      | OUTPUT PORTS | EMITTER TYPE  | WAVE ID TRANSMIT | AVAILABLE CONNECTORS | POWER      |
|-----------|-------------------------|------|------|------|------|------|--------------|---------------|------------------|----------------------|------------|
|           | 850                     | 1300 | 1310 | 1490 | 1550 | 1625 |              |               |                  |                      |            |
| OLS7-FTTx |                         |      | ◆    | ◆    |      | ◆    | 1            | Laser         | ◆                | FC, SC, ST, LC       | (2) AA, AC |
| OLS7-FTTH |                         |      | ◆    | ◆    | ◆    |      | 1            | Laser         | ◆                | FC, SC, ST, LC       | (2) AA, AC |
| OLS7-3    |                         |      | ◆    |      | ◆    | ◆    | 1            | Laser         | ◆                | FC, SC, ST, LC       | (2) AA, AC |
| OLS4      | ◆                       | ◆    | ◆    |      | ◆    |      | 2            | LED and Laser | ◆                | FC, SC, ST, LC       | (2) AA, AC |
| OLS2-DUAL |                         |      | ◆    |      | ◆    |      | 1            | Laser         | ◆                | FC, SC, ST, LC       | (2) AA, AC |
| OLS1-DUAL | ◆                       | ◆    |      |      |      |      | 1            | LED           | ◆                | FC, SC, ST, LC       | (2) AA, AC |

### OLS AC Adapter and Connector Adapters

| DESCRIPTION                                 | AFL NO.        |
|---|----------------|
| FC connector adapter                        | 2900-50-0002MR |
| SC connector adapter                        | 2900-50-0003MR |
| ST connector adapter                        | 2900-50-0004MR |
| LC connector adapter                        | 2900-50-0006MR |
| Universal flip-top dust cap for UCI outputs | 8800-00-0072PR |
| 100-240 VAC to 9 VDC, AC adapter            | 4050-00-0119PR |



### International Sales and Service Contact Information

Available at [www.AFLglobal.com/Test/Contacts](http://www.AFLglobal.com/Test/Contacts)