



# SmartPocket™

## OLS-34/35/36 Optical Light Sources



The Viavi Solutions OLS-3x series consists of small and rugged optical light sources for quick, easy, and convenient field insertion loss measurement and continuity checks.

### Pocket-Sized Light Sources for All Kind of Applications

SmartPocket optical light sources (OLS-3x) are ideal tools to complement the OLP-3x optical power meters for insertion loss and continuity testing in both multimode and single-mode optical fiber networks. They offer a dedicated and cost-optimized solution for testing and troubleshooting optical fibers in the field.

All Viavi sources are equipped with Auto-  $\lambda$  and Multi-  $\lambda$  functions compatible with any Viavi power meter. This one button operation provides a quick, simple, and error-free testing solution, which makes SmartPocket™ sources the ideal tools for daily field testing.

- The OLS-34 covers LAN/WAN access and enterprise multimode networks with 850/1300 nm
- The OLS-35 covers all standard singlemode telecommunication network applications with 1310/1550 nm
- The OLS-36 quad-wavelength solution covers both multimode and single-mode wavelengths (850/1300/1310/1550 nm)

### Key Benefits

- Cost-effective, rugged, and compact optical light sources
- Switchable optical adapter versions available for maximum flexibility
- Auto  $\lambda$  and TwinTest transmission modes
- 3-year calibration
- Combines up to 4 wavelengths in one instrument (SM+MM)

### Applications

- Link insertion loss measurements and continuity checks
- Enterprise/LAN networks with 850/1300 nm multimode wavelengths capability
- Access and metro (LAN/WAN) networks with multimode and single-mode testing combinations
- Standard single-mode wavelengths for any telecom, CATV, and military application

## A Small Product with Big Capabilities!

Large, clear screen displays:

- Battery status with low level indicator
- Power mode (PERM, ECON)
- Output wavelength setting
- Output power in dBm
- Auto wavelength coding
- Tone generation



Rugged, shock resistant, and splash proof design

Four buttons for fast, easy operation

3-way powering

- AA dry
- AA rechargeable
- AC operation via micro USB

Two connector solutions offer more flexibility:

- Fixed adapters: ST and LC
- Switchable adapters: FC, SC, ST, LC



SmartPocket OMK-3x optical test kits include an OLS-3x optical light source, an OLP-3x optical power meter, and accessories

## Technical Specifications

|                                            | <b>OLS-34<br/>Multimode Light Source</b>   | <b>OLS-35<br/>Single-Mode Light Source</b> | <b>OLS-36<br/>Quad Light Source</b>                                    |
|--------------------------------------------|--------------------------------------------|--------------------------------------------|------------------------------------------------------------------------|
| Source type                                | LED                                        | Laser                                      | LED/Laser                                                              |
| Laser safety                               | IEC 60825-1: 2003<br>IEC 60825-1: 2007     | IEC 60825-1: 2007                          | IEC 60825-1: 2003<br>IEC 60825-1: 2007                                 |
| Fiber type                                 | MM (50/125 µm)                             | SM (9/125 µm)                              | MM (50/125 µm)/SM (9/125 µm)                                           |
| Optical interface type                     | PC/1 single port for all wavelengths       | PC/1 single port for all wavelengths       | PC/1 port for MM and 1 port for SM                                     |
| Optical interface connectors               | Fixed: ST<br>Switchable: LC, FC, SC, ST    | Fixed: LC<br>Switchable SC, FC, ST, LC     | Switchable: SC, FC, ST, LC                                             |
| Central wavelength                         | 850 nm (±20 nm)<br>1300 nm (−20 nm/+40 nm) | 1310 nm (±20 nm)<br>1550 nm (±20 nm)       | 850 (±20 nm)<br>1300 (−20 nm/+40 nm)<br>1310 (±20 nm)<br>1550 (±20 nm) |
| Spectral width <sup>1</sup>                | <170 nm                                    | <5 nm                                      | <170 nm/<5 nm                                                          |
| Output power                               | −20 dBm <sup>2</sup>                       | −7 dBm                                     | −20 dBm <sup>2</sup> /−7 dBm                                           |
| Stability short term (15 min) <sup>3</sup> | ±0.02 dB                                   | ±0.02 dB                                   | ±0.02 dB                                                               |
| Stability long term (8h) <sup>3</sup>      | ±0.05 dB                                   | ±0.05 dB                                   | ±0.05 dB                                                               |
| Tone generation                            | 270 Hz, 1 kHz, 2 kHz                       | 270 Hz, 1 kHz, 2 kHz                       | 270 Hz, 1 kHz, 2 kHz                                                   |
| Auto λ mode <sup>4</sup>                   | Yes                                        | Yes                                        | Yes                                                                    |
| Multi λ mode <sup>4</sup>                  | Yes (2 λs)                                 | Yes (2 λs)                                 | Yes (4 λs)                                                             |
| Launch conditions                          | CPR capability for MM launch conditions    |                                            | CPR capability for MM launch conditions                                |

1. FWHM.

2. Into a 50/125 µm fiber.

3. After 20 minutes warm-up time, at ambient temperature range −10°C to +55°C, ΔT = ±0.3 K.

4. With Viavi power meters.

## General Specifications

| <b>Power Supply</b>              |                                                             |
|----------------------------------|-------------------------------------------------------------|
| Dry batteries                    | 2 AA 1.5 V                                                  |
| Rechargeable batteries           | 2 AA NiMH 1.2 V                                             |
| AC operation                     | Via micro USB and SNT-505                                   |
| Battery life (CW) <sup>5</sup>   | 30 h (MM)/80 h (SM)<br>Automatic power-off after 20 minutes |
| <b>Environmental Conditions</b>  |                                                             |
| EMI/ESD                          | CE compliance                                               |
| Electrical safety                | EN 61010-1: 2002                                            |
| Recommended calibration interval | 3 years                                                     |
| Operating temperature            | −10 to +60°C/+14 to +140°F                                  |
| Storage temperature              | −40 to +70°C/−40 to +158°F                                  |
| Dimensions (H x W x D)           | 30 x 80 x 150 mm/1.2 x 3.1 x 5.9 in                         |
| Weight                           | 200 g/0.45 lb                                               |

5. Typical.

## Ordering Information

| Description                                                                           | Part Number |
|---------------------------------------------------------------------------------------|-------------|
| OLS-34 LED source<br>850/1300 nm, MM, SC and FC switchable adapters                   | 2303/01     |
| OLS-34 LED source<br>850/1300 nm, MM, fixed ST/PC adapter                             | 2303/04     |
| OLS-35 laser source<br>1310/1550 nm, SM, SC and FC switchable adapters                | 2303/11     |
| OLS-35 laser source<br>1310/1550 nm, SM, fixed LC/PC adapter                          | 2303/15     |
| OLS-36 quad source<br>850/1300/1310/1550 nm, SM, MM, SC and FC<br>switchable adapters | 2303/21     |

Each product includes:

- 2 AA alkaline batteries
- Neck strap
- Belt bag
- SC switchable adapter, mounted on instrument
- FC switchable adapter as spare part

| Description                                                             | Part Number |
|-------------------------------------------------------------------------|-------------|
| <b>Optional Accessories</b>                                             |             |
| Fiber Cleaning Consumables Kit                                          | FCR-CLN-01  |
| NiMH rechargeable batteries, mignon AA, 1.2 V<br>(2 batteries required) | 2237/90.02  |
| SNT-505; universal AC power adapter, micro USB<br>connector             | 2302/90.01  |
| ST switchable adapter                                                   | 2155/00.32  |
| FC switchable adapter                                                   | 2155/00.05  |
| SC switchable adapter                                                   | 2155/00.06  |
| LC switchable adapter                                                   | 2155/00.07  |



Contact Us **+1 844 GO VIAVI**  
(+1 844 468 4284)

To reach the Viavi office nearest you,  
visit [viavisolutions.com/contacts](http://viavisolutions.com/contacts).

© 2016 Viavi Solutions Inc.  
Product specifications and descriptions in this  
document are subject to change without notice.  
ols-34-35-36-ds-fop-tm-ae  
30162956 905 0116