

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.

All Viavi sources are equipped with Auto- λ and Multi- λ 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.

Pocket-Sized Light Sources for All Kind of Applications

SmartPocket optical light sources (OLS-3x) are ideal tools to complement the OLP-3x 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.

- 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 in one instrument

Key Benefits

- Cost-effective, rugged, and compact optical light sources
- Interchangeable connectors for maximum flexibility available
- Auto λ 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: FC, SC, LC
- Interchangeable adapters: FC, SC, ST, LC, DIN



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

Technical Specifications

| | OLS-34 Multimode Light Source | OLS-35 Single-mode Light Source | OLS-36 Quad Light Source |
|--|--|--|--|
| Source type | LED | Laser | LED/Laser |
| Laser safety | IEC 60825-1: 2003 IEC 60825-1: 2007 | IEC 60825-1: 2007 | IEC 60825-1: 2003 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 | Interchangeable LC, FC, SC, ST, DIN | Fixed: LC, FC, SC Interchangeable LC, FC, SC, ST, DIN | Fixed: SC Interchangeable: LC, FC, SC, ST, DIN |
| Central wavelength | 850 nm (± 20 nm) 1300 nm (-20 nm/ $+40$ nm) | 1310 nm (± 20 nm) 1550 nm (± 20 nm) | 850 (± 20 nm) 1300 (-20 nm/ $+40$ nm) 1310 (± 20 nm) 1550 (± 20 nm) |
| Spectral width ¹ | <170 nm | <5 nm | <170 nm/<5 nm |
| Output power | -20 dBm ² | -7 dBm | -20 dBm ² /-7 dBm |
| Stability short term (15 min) ³ | ± 0.02 dB | ± 0.02 dB | ± 0.02 dB |
| Stability long term (8h) ³ | ± 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 ⁴ | Yes | Yes | Yes |
| Multi λ mode ⁴ | Yes (2 λ s) | Yes (2 λ s) | Yes (4 λ s) |
| 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 $+55^{\circ}\text{C}$, $\Delta T = \pm 0.3$ K.

4. With Viavi power meters.

General Specifications

| Power Supply | |
|--------------------------------|---|
| 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) ⁵ | 30 h (MM)/80 h (SM) Automatic power-off after 20 minutes |

Environmental Conditions

| | |
|----------------------------------|--|
| EMI/ESD | CE compliance |
| Electrical safety | EN 61010-1: 2002 |
| Recommended calibration interval | 3 years |
| Operating temperature | -10 to $+60^{\circ}\text{C}$ / $+14$ to $+140^{\circ}\text{F}$ |
| Storage temperature | -40 to $+70^{\circ}\text{C}$ / -40 to $+158^{\circ}\text{F}$ |
| 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 850/1300 nm, MM, interchangeable adapter | 2303/01 |
| OLS-35 laser source 1310/1550 nm, SM, interchangeable adapter | 2303/11 |
| OLS-35 laser source 1310/1550 nm, SM, fixed FC/PC adapter | 2303/12 |
| OLS-35 laser source 1310/1550 nm, SM, fixed SC/PC adapter | 2303/13 |
| OLS-35 laser source 1310/1550 nm, SM, fixed LC/PC adapter | 2303/15 |
| OLS-36 quad source 850/1300/1310/1550 nm, SM, MM, interchangeable adapter | 2303/21 |
| OLS-36 quad source 850/1300/1310/1550 nm, SM, MM, fixed SC/PC adapter | 2303/23 |

| Description | Part Number |
|---|-------------|
| Optional Accessories | |
| Fiber Cleaning Consumables Kit | FCR-CLN-01 |
| NiMH rechargeable batteries, mignon AA, 1.2 V (2 batteries required) | 2237/90.02 |
| SNT-505; universal AC power adapter, micro USB connector | 2302/90.01 |
| ST universal adapter | 2150/00.32 |
| DIN universal adapter | 2150/00.50 |
| FC universal adapter | 2150/00.51 |
| SC universal adapter | 2150/00.58 |
| LC universal adapter | 2150/00.59 |

Each product includes:

- 2 AA alkaline batteries
- Neck strap
- Belt bag