

VIAVI**SmartPocket****OLS-34/35/36/37/38 Optical Light Sources**

The VI

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 VI

- 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)
- The OLS-37 is a singlemode source with 3 wavelengths on one port for testing FTTH/PON networks at 1310/1550 nm and 1490 nm
- The OLS-38 is a singlemode source with 3 wavelengths on one port for testing networks at 1310/1550 nm and 1625 nm

Key Benefits

- Cost-effective, rugged, and compact optical light sources
- Switchable optical adapter versions available for maximum flexibility
- 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: 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

	OLS-34 Multimode Light Source	OLS-35/37/38 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 μ m)	SM (9/125 μ m)	MM (50/125 μ m)/SM (9/125 μ m)
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 Switchable: LC, FC, SC, ST	Fixed: LC Switchable SC, FC, ST, LC	Switchable: SC, FC, ST, LC
Central wavelength	850 nm (\pm 20 nm) 1300 nm ($-$ 20 nm/ $+$ 40 nm)	1310 nm (\pm 20 nm) 1550 nm (\pm 20 nm) 1490 nm (\pm 3 nm) for OLS-37 only 1625 nm (\pm 3 nm) for OLS-38 only	850 (\pm 20 nm) 1300 ($-$ 20 nm/ $+$ 40 nm) 1310 (\pm 20 nm) 1550 (\pm 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	\pm 0.02 dB	\pm 0.02 dB	\pm 0.02 dB
Stability long term (8h) ³	\pm 0.05 dB	\pm 0.05 dB	\pm 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 or 3 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 μ m 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, SC and FC switchable adapters	2303/01
OLS-35 laser source 1310/1550 nm, SM, SC and FC switchable adapters	2303/11
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, SC and FC switchable adapters	2303/21
OLS-37 laser source 1310/1490/1550 nm, SM, SC and FC switchable adapters	2303/41
OLS-38 laser source 1310/1550/1625 nm, SM, SC and FC switchable adapters	2303/51

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
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 switchable adapter	2155/00.32
FC switchable adapter	2155/00.05
SC switchable adapter	2155/00.06
LC switchable adapter	2155/00.07