Data Sheet



# **VIAVI**

### **SmartPocket**

OLS-34/35/36/37/38 Optical Light Sources

The VIAVI 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)
- 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



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 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 Switchable: LC, FC, SC, ST	Fixed: LC Switchable SC, FC, ST, LC	Switchable: SC, FC, ST, LC
Central wavelength	850 nm (±20 nm) 1300 nm (–20 nm/+40 nm)	1310 nm (±20 nm) 1550 nm (±20 nm) 1490 nm (±3 nm) for OLS-37 only 1625 nm (±3 nm ) for OLS-38 only	850 (±20 nm) 1300 (–20 nm/+40 nm) 1310 (±20 nm) 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 or 3 λs)	Yes (4 λs)
Launch conditions	CPR capability for MM launch conditions		CPR capability for MM launch conditions

<sup>1.</sup> FWHM.

# **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) <sup>5</sup>	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°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			

<sup>5.</sup> Typical.

<sup>2.</sup> Into a 50/125 µm fiber.

<sup>3.</sup> After 20 minutes warm-up time, at ambient temperature range -10 °C to +55 °C,  $\Delta T = \pm 0.3$  K.

<sup>4.</sup> With VIAVI power meters.

#### **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			



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