



OLS4 Integrated Laser and LED Source

The OLS4 integrated, two-port LED and LASER light source is a cost-effective, rugged, handheld instrument designed for performing insertion loss measurements on multimode or single-mode fiber optic links when used with an optical power meter. When paired with an optical fiber identifier, the OLS4 may be used for fiber identification. The LED and LASER outputs are stabilized to ensure accurate test results per current TIA/EIA requirements.

The OLS4 features 850 nm and 1300 nm LED output from a multimode output port and 1310 nm and 1550 nm LASER output from a single-mode output port. This light source offers 4 modes of operation: Dual wavelengths sending ID, single wavelength sending ID, CW, and modulated Tone. [Active Output], [Tone], [Battery], and [External Power] indicators identify the currently enabled operating mode, battery charge status, and external power presence. Both output ports are equipped with UCI based removable adapters to allow the output connectors to be inspected and cleaned.

In addition to being powered by two AA alkaline batteries, the OLS4 can be powered by optional AC adapter and/or rechargeable NiMH battery pack. The OLS4 is fully N.I.S.T. traceable.

Features

- Rugged, handheld, lightweight
- Integrated LED and Laser light source
- Dual wavelengths from a single port
- Certify multimode and single-mode links per TIA/EIA standards
- Dual Wave ID, single Wave ID, CW, and modulated Tone (on single-mode output)
- 270 Hz, 330 Hz, 1 kHz, and 2 kHz supported Tone (2 kHz default)
- Free 50 μ m and 62.5 μ m mandrels
- AA alkaline, optional rechargeable NiMH battery pack or AC adapter
- Long battery life
- Low battery indicator
- Cost-effective, easy to use
- N.I.S.T. Traceable

Ordering Information

Model	Includes
OLS4	Protective rubber boot, AA batteries, mandrels, manual, and carry case.

Optical light sources and optical power meters can be packaged together as a kit.



Applications

- The 850 and 1300 nm LED output can be used for testing Gigabit Ethernet, Token Ring, FDDI, and other multimode LAN systems.
- The 1310 and 1550 nm LASER output can be used for single-mode applications, such as Telecom or CATV.
- In the modulation Tone mode, the OLS4 generates a Tone signal into single-mode fiber. This signal is detected by the OFI-200, optical fiber identifier, to isolate specific fibers in a bundle prior to splicing or rerouting.

Specifications

Optical	MM Optical Port		SM Optical Port	
	850 \pm 30 nm	1300 -10/+50 nm	1310 \pm 20 nm	1550 \pm 20 nm
Wavelength	850 \pm 30 nm	1300 -10/+50 nm	1310 \pm 20 nm	1550 \pm 20 nm
Emitter type	LED, Class 1 (IEC 60825 - 1)		Laser, Class 1 (FDA 21 CFR 1040.10 and 1040.11, and IEC 60825-1)	
Output power	> - 20 dBm, 62.5 μ m Multimode*		0 dBm, 9 μ m Single-mode	
Spectral width (FWHM)	40 nm (typ)	120 nm (typ)	5 nm (max)	5 nm (max)
Optical connectors	SC (FC, ST, or LC available)		SC (FC, ST, or LC available)	
Stability	\pm 0.1 dB over 8 hours (after 5 min. warm-up)		\pm 0.05 dB over 1 hour (after 15 min. warm-up) \pm 0.1 dB over 8 hours (after 15 min. warm-up)	
General				
Power	2 x AA batteries, optional NiMH or AC adapter			
Battery life (2 x AA)	Typical 30 hours, Minimum 20 hours		Typical 120 hours, Minimum 75 hours	
Operating temperature	-10 to 50°C, 90% RH (non-condensing)			
Storage temperature	-30 to 60°C, 90% RH (non-condensing)			
Size (H x W x D)	5.5 x 3.2 x 1.5 in (14.0 x 8.1 x 3.8 cm)			
Weight	0.65 lb (.29 kg)			

* Output power will be approximately 3 dB less if a 50 μ m mandrel-wrapped jumper is used instead of a 62.5 μ m mandrel-wrapped jumper. All specifications at 25°C