



OLS 4 Integrated Laser and LED Light Source

The OLS 4 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 OLS 4 may be used for fiber identification. The LED and LASER outputs are stabilized to ensure accurate test results per current TIA/EIA requirements.

The OLS 4 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 removable SC (FC & ST available) adapters to allow the output connectors to be inspected and cleaned.

In addition to being powered by two AA alkaline batteries, the OLS 4 can be powered by optional AC adapter and/or rechargeable NiMH battery pack. The OLS 4 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

The OLS 4 package includes:
OLS 4 light source, protective rubber boot, AA batteries, mandrels, manual, and carry case.

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 OLS 4 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 available)		SC (FC & ST available)	
Stability	\pm 0.1 dB over 8 hours (after 5 min. warm-up)		\pm 0.1 dB over 1 hour (after 20 min. warm-up) \pm 0.15 dB over 8 hours (after 20 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

