



## OLS 1 LED Light Source

The OLS 1 LED light source is a cost-effective, rugged, handheld instrument designed for performing insertion loss measurements on fiber optic links when used with an optical power meter. The LED output is stabilized to ensure accurate test results per current TIA/EIA requirements.

The OLS 1 is easy to operate with only a [Wavelength/ Power] switch, which selects optical wavelengths or disables unit (⊕ position). [Active Output], [Battery], and [External Power] indicators identify the currently enabled output port, battery charge status, and external power presence. Weighing only 0.65 lb, the OLS 1 is compact and convenient for field use. The OLS 1 operates over 60 hours from a typical 9V alkaline battery. An AC adapter is optional for extended use.

The OLS 1 light source is fully N.I.S.T. traceable.

### applications

- Operating at 850 nm, the OLS 1-1C can be used for testing Ethernet, Gigabit Ethernet, Token Ring, and other multimode LAN systems.
- Operating at 660 nm, the OLS 1-1C can test 1000µ fiber and trace fibers with the visible 660 nm output.
- The OLS 1-2C operates at 850 and 1300 nm for use on Ethernet, Token Ring, and FDDI. The 1300 nm output can also be used to test short distance (up to 10 km) single-mode fiber links.

### features

- Rugged, handheld, lightweight
- 850 and 1300 nm LED (multimode) light sources (660 nm available)
- Certify 50 or 62.5 µm multimode fiber links for any 850 or 1300 nm application, including Gigabit Ethernet (GBE) per TIA/EIA standards
- Free 50 µm and 62.5 µm mandrels
- Long battery life
- Cost-effective, easy to use
- N.I.S.T. Traceable

### specifications

Optical Specifications	OLS 1-1C	OLS 1-2C
Output wavelength (nm)	660 - red, 850 + 35/-40	850 + 35/-40, 1300 +50/-10
Spectral width (nm) (typ) (FWHM)	30, 40	40, 120
Output power (dBm)	-10* , >-20	>-20, >-20
Fiber size (µm)	1000, 62.5**	62.5**
Output connector	ST	ST
Emitter classification	Class 1 (IEC 60825 - 1)	
Stability	± 0.1 dB over 8 hours (after 5 min. warm-up)	
<b>General Specifications</b>		
Power	Typical 60 hours with 9V battery, optional AC adapter	
Operating temperature	-10 to 50°C	
Storage temperature	-30 to 60°C	
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)	

\* -10 dBm output is into 1000 micron fiber.

\*\* May be used to test 50 or 62.5 µm fiber with supplied mandrels.

All specifications at 25°C

### ordering information

The OLS 1 package includes:

OLS 1 LED light source, 50 and 62.5µm mandrels, protective rubber boot, 9 volt battery, manual, and carry case.

