



OLS1 LED Light Source

The OLS1 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 OLS1 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 OLS1 is compact and convenient for field use. The OLS1 operates over 60 hours from a typical 9V alkaline battery. An AC adapter is optional for extended use.

The OLS1 light source is fully N.I.S.T. traceable.

Applications

- Operating at 850 nm, the OLS1-1C can be used for testing Ethernet, Gigabit Ethernet, Token Ring, and other multimode LAN systems.
- Operating at 660 nm, the OLS1-1C can test 1000µ fiber and trace fibers with the visible 660 nm output.
- The OLS1-2C 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 62.5µm multimode fiber links for any 850 or 1300 nm application, including Gigabit Ethernet (GBE) per TIA/EIA standards
- Free 50µm and 62.5µm mandrels
- Long battery life
- Cost-effective, easy to use
- N.I.S.T. Traceable

Ordering Information

Model	Includes
All OLS1 models	Protective rubber boot, 9V battery, 50 and 62.5µm mandrels, manual, and carrying case.

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

Specifications

Optical Specifications	OLS1-1C		OLS1-2C	
	Output ports	2		2
Output wavelength	660 nm- red	850 + 35/-40 nm	850 + 35/-40 nm	1300 +50/-10 nm
Spectral width (typ) (FWHM)	30 nm	40 nm	40 nm	120 nm
Output power	-10 dBm*	>-20 dBm	>-20 dBm	>-20 dBm
Fiber size	1000 µm, 62.5 µm**		62.5 µm**	
Output connector	ST		ST	
Emitter type	LED, Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03			
Stability	± 0.1 dB over 8 hours (after 5 min. warm-up)			
General Specifications				
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)	14.0 x 8.1 x 3.8 cm (5.5 x 3.2 x 1.5 in)			
Weight	0.29 kg (0.65 lb)			

* -10 dBm output is into 1000 micron fiber.

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

All specifications at 25°C



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