

## The Lightwave DLS/OLS

The Digital Lightwave LW DLS and LW OLS are lightweight handheld laser sources for accurate wavelength fiber-optic testing.

The Digital Lightwave LW DLS™ (Dual Laser Source) offers excellent stability and portability for accurate dual-wavelength (1310/1550 nm) fiber-optic testing. The LW OLS™ (Quad Laser Source) offers accurate wavelength testing at four wavelengths (850, 1300, 1310, 1550).

These compact units operate in either continuous wave mode or 2 KHz modulated mode. With an output power of -10 dBm, the LW DLS/LW OLS provides in excess of 50 dB range when used with Digital Lightwave optical power meters. The optical output uses a top panel FC, SC, or ST connector, and may be equipped with other style connectors on request.

When used with an optical power meter, the LW DLS or LW OLS laser source provide inexpensive alternatives to higher-priced loss test sets. The LW DLS or LW OLS may be substituted for terminal equipment in the central office to provide a stable output for loss measurements.

For single-mode applications, such as telecom or CATV, the LW DLS may be coupled with an optical power

meter as a test kit to perform optical loss tests at 1310 or 1550 nm. In the modulation mode, the LW DLS applies a 2 KHz tone into the fiber. This signal is detected by the LW OSD™ (Optical Signal Detector) to isolate specific fibers in a bundle prior to splicing or rerouting.

For multimode applications, such as metro Ethernet rings, the LW OLS coupled with a power meter allow for loss testing on most types of fibers and optical ranges.



Lightwave DLS (LW DLS)

# The Lightwave DLS

The Lightwave (LW) product series is a comprehensive line of handheld and ultra-compact test equipment for measuring, maintaining, and documenting the physical-layer performance of fiber-optic networks.

## Optical Specifications

Output Wavelength	1310/1550 $\pm$ 20 nm (LW DLS) 850/1300/1310/1550 nm (LW OLS)
Output Power <sup>1</sup>	-10 dBm
Laser Classification	Class 1
Output Connector <sup>2</sup>	FC, SC, or ST
Modes of Operation <sup>3</sup>	Continuous wave (CW) and 2 kHz modulation
Spectral Width	5 nm typical
Stability <sup>4</sup>	$\pm$ 0.1 dB over 1 hour

## General Specifications

Power	9 V battery or AC adapter (optional)
Operating Temperature	0° to 40° C
Storage Temperature	-10° to 50° C
Size (H x W x D)	4.5 x 7.5 x 1.0 in (11.5 x 7.0 x 2.5 cm)
Weight	1 lb (0.45 kg)

## Major Features

- Rugged, portable unit
- Designed for field use
- 1310/1550 dual wavelengths or 850/1300/1310/1550 quad wavelengths
- Modulated 2 kHz or continuous wave
- Adjustable output
- Low battery indicator

1. Adjustable +1 dB.
2. Other connectors available on request.
3. Other modulation frequencies available.
4. After 20 minute warm-up.

*Note:* All specifications at 20° C. Single-wavelength models are available with higher output power and other wavelengths. Specifications are subject to change without notice.



www.Lightwave.com  
info@Lightwave.com

Americas  
Corporate Headquarters  
15550 Lightwave Drive  
Clearwater, FL 33760  
Toll free: +1 877 442 DIGL  
T: +1 727 442 6677  
F: +1 727 442 5660

Europe/Middle East/Africa  
Eastway Enterprise Centre  
7 Paynes Park  
Hitchin Hertfordshire  
England SG5 1EH  
T: +44 (0) 1462 429719  
F: +44 (0) 1462 429760

Asia/Pacific Rim  
Braeside Grove  
Unit 4, Sibthorpe Street  
Braeside, Victoria,  
Australia 3195  
T: +61.3.9587 4900  
F: +61.3.9587 4990

**Ordering Information** For feature availability, ordering, and pricing information, call +1 727 442 6677 or visit [www.lightwave.com](http://www.lightwave.com).

Digital Lightwave provides industry-leading products, technologies, and services for deploying and managing communications networks. Telecommunications service providers and equipment manufacturers rely on our offerings to develop, install, maintain, and manage high-performance networks. With a presence in more than 80 countries, Digital Lightwave enables customers to successfully implement global networks worldwide. To find the nearest sales office, please visit [www.lightwave.com](http://www.lightwave.com).