



## AFL Optical Light Source (850 and 1300nm)

### OLS Series Light Sources

#### Features

- Rugged, dependable, tools backed with 5-Year Warranty
- Simple user interface minimizes training requirements
- Stabilized outputs for accurate loss measurements
- Wave ID supports testing up to three wavelengths simultaneously
- Field swappable output adapters provide flexibility

#### Applications

- Link loss measurements
- Certify SM and MM links to industry standards
- Continuity check and fiber identification for maintenance restoration

With more than 25 years of experience in the optical testing industry and thousands of units in use around the world, AFL is a trusted supplier of optical light sources. Backed by 5-year product warranties, these are the quality products you can trust.

#### Designed for use in outside plant environments

- Splash resistant controls
- Withstands one-meter drop test
- Controls designed for easy operation with gloves
- Field swappable output adapters allow access for cleaning optical port and supports multiple connector styles
- Efficient design provides long test time from globally available AA batteries. External power adapter available for extended testing or lab situations.

#### Output Modes Supported

- Wave ID (Triple, Dual, or Single) decreases test time while reducing technician errors
- CW mode provides continuous output (no encoding)
- Test Tone (2000, 1000, 330, 270 Hz) for use in fiber identification with AFL brand power meters (with fiber end access) or AFL brand Optical Fiber Identifier (OFI) products for non-intrusive, mid-span testing

5 YEAR  
WARRANTY



OLS7 Optical Laser Source

5 YEAR  
WARRANTY



OLS4 Optical Laser Source



FOC Part # OLS 1-DUAL

## OLS Series Light Sources

### OLS Series Models and Applications

MODEL	MM / SM	WAVELENGTHS (nm)	APPLICATIONS
OLS7-FTTx	SM	1310, 1490, 1625	FTTH Networks
OLS7-FTTH	SM	1310, 1490, 1550	FTTH Networks
OLS7-3	SM	1310, 1550, 1625	Telecom & CATV Networks
OLS4	MM / SM	850, 1300 / 1310, 1550	Loss Testing of SM/MM networks
OLS2-Dual	SM	1310, 1550	SM Networks, LAN/WAN Testing
OLS1-Dual	MM	850, 1300	Ethernet, Token Ring, and FDDI Fiber Links

### Specifications <sup>a</sup>

OPTICAL SPECIFICATIONS: OLS7 MODELS									
MODEL	OLS7-FTTx (Single Port)			OLS7-FTTH (Single Port)			OLS7-3 (Single Port)		
Wavelength ( $\pm 20$ nm)	1310 nm	1490 nm	1625 nm	1310 nm	1490 nm	1550 nm	1310 nm	1550 nm	1625 nm
Spectral Width	5 nm	3 nm	2 nm	5 nm	3 nm	5 nm	5 nm	5 nm	2 nm
Emitter Type	Laser								
Safety Class	Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03								
Output Power	-5 dBm (typical), 9/125 fiber								
Output Stability	$\pm 0.05$ dB over 1 hour (after 15 minutes warm-up) $\pm 0.1$ dB over 8 hours (after 15 minutes warm-up)								
Tone Output	270 Hz, 330 Hz, 1 kHz, 2 kHz								
OPTICAL SPECIFICATIONS: OLS4, OLS2-DUAL & OLS1-DUAL MODELS									
MODEL	OLS4 (MM Optical Port)		OLS4 (SM Optical Port)		OLS2-DUAL (Single Port)		OLS1-DUAL (Single Port <sup>b</sup> )		
Wavelength	850 $\pm 30$ nm	1300 +30/-20 nm	1310 $\pm 20$ nm	1550 $\pm 20$ nm	1310 $\pm 20$ nm	1550 $\pm 20$ nm	850 $\pm 30$ nm	1300 +30/-20 nm	
Spectral Width	45 nm (typ)	120 nm (typ)	5 nm (max)	5 nm (max)	5 nm (max)		45 nm (typ) 120 nm (typ)		
Emitter Type	LED		Laser		Laser		LED		
Safety Class	Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03								
Output Power	$> -20$ dBm, 62.5 $\mu$ m multimode <sup>c</sup>		0 dBm, 9 $\mu$ m single-mode		0 dBm, 9 $\mu$ m single-mode <sup>d</sup>		$> -20$ dBm, 62.5 $\mu$ m multimode <sup>c</sup>		
Output Stability	$\pm 0.1$ dB over 8 hours (after 5 minutes warm-up)		$\pm 0.05$ dB over 1 hour (after 15 minutes warm-up) $\pm 0.1$ dB over 8 hours (after 15 minutes warm-up)				$\pm 0.1$ dB over 8 hours (after 5 minutes warm-up)		
Tone Output	N/A		2 kHz		270 Hz, 330 Hz, 1 kHz, 2 kHz			N/A	
GENERAL SPECIFICATIONS: ALL OLS MODELS									
Available Adapters	SC FC, ST, LC								
Power	2 AA batteries, optional AC adapter								
Battery Life	SM port: 72 hours typical (40 hours minimum). MM port: 30 hours typical (20 hours minimum)								
Operating Temperature	-10 °C to 50 °C, 90 % RH (non-condensing)								
Storage Temperature	-30 °C to 60 °C, 90 % RH (non-condensing)								
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)								

**Notes:**

- All specifications valid at 25°C unless otherwise specified.
- May be used to test 50 or 62.5  $\mu$ m fiber with supplied mandrels.
- Output power will be approximately 3 dB less if a 50  $\mu$ m mandrel-wrapped jumper is used instead of a 62.5  $\mu$ m mandrel-wrapped jumper.
- Adjustable 2 dB.

## OLS Series Light Sources

### Ordering Information

When ordering, specify connector type at the end of model number (e.g. OLS2-DUAL-SC).

All OLS models include protective rubber boot, 2 AA batteries and carry case. AC adapters are available (ordered separately), see table below. Test jumpers and connector adapters are required for operation (purchased separately). Test jumpers with a variety of connector styles and fiber types and adapter caps for most common connectors may be purchased from AFL.

AFL NO.	OUTPUT WAVELENGTHS (nm)						OUTPUT PORTS	EMITTER TYPE	WAVE ID TRANSMIT	AVAILABLE CONNECTORS	POWER
	850	1300	1310	1490	1550	1625					
OLS7-FTTx			◆	◆		◆	1	Laser	◆	FC, SC, ST, LC	(2) AA, AC
OLS7-FTTH			◆	◆	◆		1	Laser	◆	FC, SC, ST, LC	(2) AA, AC
OLS7-3			◆		◆	◆	1	Laser	◆	FC, SC, ST, LC	(2) AA, AC
OLS4	◆	◆	◆		◆		2	LED and Laser	◆	FC, SC, ST, LC	(2) AA, AC
OLS2-DUAL			◆		◆		1	Laser	◆	FC, SC, ST, LC	(2) AA, AC
OLS1-DUAL	◆	◆					1	LED	◆	FC, SC, ST, LC	(2) AA, AC

### OLS AC Adapter and Connector Adapters

DESCRIPTION	AFL NO.
FC connector adapter	2900-50-0002MR
SC connector adapter	2900-50-0003MR
ST connector adapter	2900-50-0004MR
LC connector adapter	2900-50-0006MR
Universal flip-top dust cap for UCI outputs	8800-00-0072PR
100-240 VAC to 9VDC, AC adapter	4050-00-0119PR