



SMLP 4-4 single-mode/multimode test kit with Wave ID and set reference

The SMLP 4-4 test kit combines the OPM 4-2D optical power meter and OLS 4 integrated LED and LASER light source and is ideally suited for testing fiber optic networks with hybrid (single-mode and multimode) cables.

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. The LED and LASER outputs are stabilized to ensure accurate test results per current TIA/EIA requirements. 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. The OPM 4-2D offers Wave ID, automatic wavelength identification and switching, when used with the OLS 4. Multiple test Tone detection is provided for fiber identification. The OPM 4-2D stores optical references for each calibrated wavelength. An easy to read Dual Wavelength LCD display with Backlight shows measured power [dBm or μ W] or insertion loss [dB], calibrated wavelengths, tone signal [Hz], wavelength ID, and the battery charge status.

In addition to being powered by two AA alkaline, the OPM 4-2D or OLS 4 can be powered by optional AC adapter and/or rechargeable NiMH battery pack.

The OPM 4-2D optical input port accepts Noyes thread-on style adapter caps. Adapter caps are required for operation and must be ordered separately.

The OPM 4-2D and OLS 4 are fully N.I.S.T. traceable.

Features

- Rugged, handheld, lightweight
- Designed for field use
- Certify multimode and single-mode links per TIA/EIA standards
- Wave ID - automatic wavelength identification and switching
- Dual Wave ID, single Wave ID, CW, and modulated Tone (on single-mode output)
- 270 Hz, 330 Hz, 1 kHz, and 2 kHz Tone
- Large LCD with Backlight
- Power measurements in dBm or μ W; insertion loss in dB
- Reference power level storage
- AA alkaline, optional rechargeable NiMH battery pack or AC adapter
- Low battery indicator
- Free 50 μ m and 62.5 μ m mandrels
- Cost-effective, easy to use
- N.I.S.T traceable

Ordering Information

Model	Includes
SMLP 4-4	OLS 4 optical light source, OPM 4-2D optical power meter, AA batteries, protective rubber boots, adapter cap, 50 and 62.5 μ m mandrels, user's guide, and carry case.

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 Telecommunications.



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OLS 4 Light Source specifications

Optical	MM Optical Port		SM Optical Port	
Wavelength	850 ± 30 nm	1300 -10/+50 nm	1310 ± 20 nm	1550 ± 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 μm Multimode*		0 dBm, 9 μm 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	± 0.1 dB over 8 hours (after 5 min. warm-up)		± 0.05 dB over 1 hour (after 15 min. warm-up) ± 0.1 dB over 8 hours (after 15 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 μm mandrel-wrapped jumper is used instead of a 62.5 μm mandrel-wrapped jumper.
All specifications at 25°C

OPM 4-2D specifications

Optical	OPM 4-2D
Calibrated wavelengths	850, 1300, 1310, 1550 nm
Detector type	Germanium (Ge)
Measurement range	+6 to -60 dBm
Tone detect range	+6 to -50 dBm +6 to -45 dBm for 850nm
Wavelength ID range	+6 to -50 dBm +6 to -45 dBm for 850nm
Accuracy*	± 0.25 dB
Resolution	0.01 dB
Measurement units	dB, dBm, μW
General	
Power	2 x AA batteries, optional NiMH or AC adapter
Battery life (2 x AA)	300 hours with backlight [Off] 20 hours with backlight [On]
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	0.58 lb (0.26 kg)

* Accuracy measured at 25°C and -10 dBm per N.I.S.T. standards.
All specifications at 25°C

