



SMLP4-4 Single-mode / Multimode Test Kit with Wave ID and Set Reference

The SMLP4-4 test kit combines the OPM4-2D optical power meter and OLS4 integrated LED and LASER light source and is ideally suited for testing fiber optic networks with hybrid (single-mode and multimode) cables.

The OLS4 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 UCI based removable adapters to allow the output connectors to be inspected and cleaned.

The OPM4-2D offers Wave ID, automatic wavelength identification and switching, when used with the OLS4. Multiple test Tone detection is provided for fiber identification. The OPM4-2D stores optical references for each calibrated wavelength. An easy to read Dual Wavelength LCD display with Backlight shows measured power [dBm or μW] 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 OPM4-2D or OLS4 can be powered by optional AC adapter and/or rechargeable NiMH battery pack.

The OPM4-2D optical input port accepts Noyes thread-on style adapter caps. Adapter caps are required for operation and must be ordered separately.

The OPM4-2D and OLS4 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 μW; insertion loss in dB
- Reference power level storage
- AA alkaline, optional rechargeable NiMH battery pack or AC adapter
- Low battery indicator
- Free 50 μm and 62.5 μm mandrels
- Cost-effective, easy to use
- N.I.S.T traceable

Ordering Information

Model	Includes
SMLP4-4	OLS4 optical light source, OPM4-2D optical power meter, AA batteries, protective rubber boots, adapter cap, 50 and 62.5 μm 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.



continued on the next page

SMLP4-4 single-mode/multimode test kit with Wave ID and set reference

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, or LC available)		SC (FC, ST, or LC 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

OPM4-2D specifications

Optical	OPM4-2D
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

