

Optical Loss Test Kits SMLP, SLP, MLP Series



SMLP5-5 Kit

EF Compliant solutions available, see pages 3 - 4 for details



Encircled Flux (EF) Mode Controller

AFL Legacy – 30 years of supplying fiber optic solutions. Customer Loyalty – Leading Telecommunications and Enterprise customers around the world rely on AFL test sets. With over 100,000 test sets shipped, AFL delivers reliable performance – leading the industry with a full 5-year warranty.

Features

- Rugged, dependable, tools backed with 5-year warranty
- Wave ID supports testing up to three wavelengths simultaneously
- Field swappable connector adapters provide flexibility
- Long battery life from globally available AA batteries

Designed for use in outside plant environments

- Splash resistant controls
- Withstands one-meter drop test
- Controls designed for easy operation with gloves
- Field swappable connector adapters provide flexibility and access for cleaning optical ports at time of test

Wave ID - Increase test speed with fewer errors

- Simultaneous multi-wavelength testing cuts loss measurement time in half or more
- Automatic wavelength identification eliminates setup errors and simplifies coordination between users at opposite ends of fiber

Applications

- Certify multimode and single-mode links per TIA/EIA standards
- Passive Optical Networks (PON) testing
- Certification report generation with TRM® 2.0 software
- Fiber identification prior to splicing
- Continuity checking

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Specifications ^a

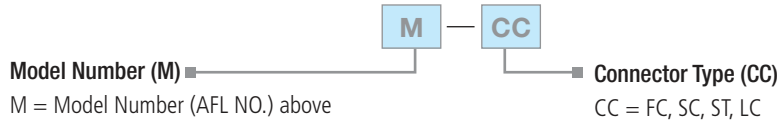
| OPTICAL SPECIFICATIONS - POWER METERS | | | | | | | | | |
|--|--|---------|--|---|--|---------|---|---------|-----------------------|
| MODEL | OPM5-4D, OPM4-4D | | | OPM5-3D, OPM4-3D | | | OPM5-2D, OPM4-2D | | OPM4-1D |
| Calibrated Wavelengths | 850, 980, 1300, 1310, 1490, 1550, 1625 nm | | | 850, 1300, 1310, 1490, 1550, 1625 nm | | | 850, 1300, 1310, 1490, 1550 nm | | 650, 660, 780, 850 nm |
| Detector Type | Filtered InGaAs | | | InGaAs | | | Germanium (Ge) | | Silicon (Si) |
| Measurement Range | +26 to -50 dBm | | | +10 to -75 dBm | | | +6 to -60 dBm | | +6 to -70 dBm |
| Tone Detect Range | +6 to -30 dBm +6 to -25 dBm for 850 nm | | | +10 to -50 dBm +10 to -45 dBm for 850 nm | | | +6 to -50 dBm +6 to -45 dBm for 850 nm | | +6 to -45 dBm |
| Wavelength ID Range | +6 to -30 dBm +6 to -25 dBm for 850 nm | | | +10 to -50 dBm +10 to -45 dBm for 850 nm | | | +6 to -50 dBm +6 to -45 dBm for 850 nm | | — |
| Accuracy ^b | ±0.25 dB | | | | | | | | |
| Resolution | 0.01 dB | | | | | | | | |
| Measurement Units | dB, dBm, µW | | | | | | | | |
| OPTICAL SPECIFICATIONS: OLS7 MODELS | | | | | | | | | |
| MODEL | OLS7-FITX (Single Port) | | | OLS7-FTH (Single Port) | | | OLS7-3 (Single Port) | | |
| Wavelength (±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 | bClass I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03 | | | | | | | | |
| Output Power | -5 dBm (typical), 9/125 fiber | | | | | | | | |
| Output Stability | ±0.05 dB over 1 hour (after 15 minutes warm-up) ±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 ^b) | | |
| Wavelength | 850 ±30 nm | | 1300 +30/-20 nm | | 1310 ±20 nm | | 1550 ±20 nm | | |
| Spectral Width | 45 nm (typ) | | 120 nm (typ) | | 5 nm (max) | | 5 nm (max) | | |
| 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 µm multimode ^c | | 0 dBm, 9 µm single-mode | | 0 dBm, 9 µm single-mode ^d | | >-20 dBm, 62.5 µm multimode ^c | | |
| Output Stability | ±0.1 dB over 8 hours (after 5 minutes warm-up) | | ±0.05 dB over 1 hour (after 15 minutes warm-up) ±0.1 dB over 8 hours (after 15 minutes warm-up) | | ±0.05 dB over 1 hour (after 15 minutes warm-up) ±0.1 dB over 8 hours (after 15 minutes warm-up) | | ±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 OPM AND OLS MODELS | | | | | | | | | |
| Available Adapters | SC FC, ST, LC | | | | | | | | |
| Power | 2 AA batteries | | | | | | | | |
| 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 µm fiber with supplied mandrels.
- 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.
- Adjustable 2 dB.

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Part Number – Connector Specification



Examples:

SMLP5-5-SC => (SMLP5-5 Test Kit with SC adapters)

SLP4-6D-LC => (SLP4-6D Test Kit with LC adapters)

Ordering Information

Test kits include light source, power meter, protective rubber boots, AA batteries, and adapter caps in a protective carry case.

Kits with OPM5 power meter include USB cable and PC reporting tool – TRM® 2.0 Windows® compatible software.

Kits with multimode sources include 50 and 62.5 μm fiber mandrels.

| AFL NO. | POWER METER | LIGHT SOURCE | FIBER TYPE | LOSS MEASUREMENTS (nm) | | | | | | DYNAMIC RANGE (dB) | TRM® 2.0 PC REPORTING TOOL |
|-----------|-------------|--------------|------------|------------------------|------|------|------|------|------|---|----------------------------|
| | | | | 850 | 1300 | 1310 | 1490 | 1550 | 1625 | | |
| SMLP5-5 | OPM5-2D | OLS4 | MM SM | ◆ | ◆ | ◆ | | ◆ | | 40 @ 850/1300 nm ^a 60 @ 1310/1550 nm ^b | ◆ |
| SMLP4-4 | OPM4-2D | OLS4 | MM SM | ◆ | ◆ | ◆ | | ◆ | | 40 @ 850/1300 nm ^a 60 @ 1310/1550 nm ^b | |
| SLP5-FTTx | OPM5-3D | OLS7-FTTx | SM | | | ◆ | ◆ | | ◆ | 70 ^b | ◆ |
| SLP5-FTTH | OPM5-4D | OLS7-FTTH | SM | | | ◆ | ◆ | ◆ | | 45 ^b | ◆ |
| SLP5-7 | OPM5-4D | OLS7-3 | SM | | | ◆ | | ◆ | ◆ | 45 ^b | ◆ |
| SLP5-6D | OPM5-4D | OLS2-DUAL | SM | | | ◆ | | ◆ | | 50 ^b | ◆ |
| SLP5-6 | OPM5-3D | OLS2-DUAL | SM | | | ◆ | | ◆ | | 70 ^b | ◆ |
| SLP4-FTTx | OPM4-3D | OLS7-FTTx | SM | | | ◆ | ◆ | | ◆ | 70 ^b | |
| SLP4-FTTH | OPM4-4D | OLS7-FTTH | SM | | | ◆ | ◆ | ◆ | | 45 ^b | |
| SLP4-7 | OPM4-4D | OLS7-3 | SM | | | ◆ | | ◆ | ◆ | 45 ^b | |
| SLP4-6D | OPM4-4D | OLS2-DUAL | SM | | | ◆ | | ◆ | | 50 ^b | |
| SLP4-6 | OPM4-3D | OLS2-DUAL | SM | | | ◆ | | ◆ | | 70 ^b | |
| MLP5-2D | OPM5-2D | OLS1-DUAL | MM SM | ◆ | ◆ | | | | | 40 @ 850/1300 nm ^a 22 @ 1300 nm ^b | ◆ |
| MLP4-2D | OPM4-2D | OLS1-DUAL | MM SM | ◆ | ◆ | | | | | 40 @ 850/1300 nm ^a 22 @ 1300 nm ^b | |

Notes:

- a. On 62.5/125 μm multimode fiber.
- b. On 9/125 μm single-mode fiber.

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Encircled Flux Compliance

For EF Compliant applications, use AFL Mode Controller Jumpers (MCJ) on multimode ports. Plug MCJ input into an LED test source for EF Compliant output meeting TIA-568-14-B and IEC 621180-4-1.

Note: MCJs are one directional (input to output). Order output connector styles matching networks to test. Select from the Accessories table below.

Accessories

| DESCRIPTION | AFL NO. |
|--|----------------|
| LIGHT SOURCE CONNECTOR ADAPTERS | |
| FC connector adapter | 2900-50-0002MR |
| SC connector adapter | 2900-50-0003MR |
| ST connector adapter | 2900-50-0004MR |
| LC connector adapter | 2900-50-0006MR |
| POWER METER CONNECTOR ADAPTERS | |
| FC connector adapter | 8800-00-0200 |
| SC connector adapter | 8800-00-0209 |
| ST connector adapter | 8800-00-0202 |
| LC connector adapter | 8800-00-0225 |
| ENCIRCLED FLUX (EF) MODE CONTROLLER | |
| FC to FC, 50/125 μm | 8700-06-0001MR |
| FC to FC, 2.5/125 μm | 8700-06-0002MR |
| SC to SC, 50/125 μm | 8700-06-0003MR |
| SC to SC, 62.5/125 μm | 8700-06-0004MR |
| SC to LC, 50/125 μm | 8700-06-0005MR |
| SC to LC, 62.5/125 μm | 8700-06-0006MR |
| MULTIMODE TEST CORDS (50/125 μm – 2 meters) | |
| FC/FC | 8700-00-0093 |
| SC/ST | 8700-00-0064 |
| SC/SC | 8700-00-0065 |
| LC/LC | 8700-00-0082 |

| DESCRIPTION | AFL NO. |
|---|-----------------|
| SINGLE-MODE TEST CORDS (9/125 μm – 2 meters) | |
| FC/FC | 8700-00-0005 |
| FC/ST | 8700-00-0016 |
| ST/ST | 8700-00-0017 |
| SC/SC | 8700-00-0018 |
| FC/SC | 8700-00-0021 |
| SC/ST | 8700-00-0022 |
| SC/LC | 8700-00-0046 |
| FC/LC | 8700-00-0071 |
| LC/LC | 8700-00-0097 |
| MATING ADAPTERS (Bulkheads) | |
| FC/FC | 8400-00-0004MR |
| SC/SC | 8400-00-0045MR |
| ST/ST | 8400-00-0020 |
| LC/LC | 8400-00-0075 |
| CLEANING SUPPLIES | |
| One-Click Cleaner SC/ST/FC | 8500-05-0001MZ |
| One-Click Cleaner LC | 8500-05-0002MZ |
| Cletoptop –SB Cassette Cleaner | 8500-10-0016MZ |
| Cletoptop –SB Refill Cartridge | 8500-10-00017MZ |



International Sales and Service Contact Information

Available at www.AFLglobal.com/Test/Contacts