

### Optical Loss Test Kits SMLP, SLP, MLP Series

**5 YEAR WARRANTY**



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

## Optical Loss Test Kits SMLP, SLP, MLP Series

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

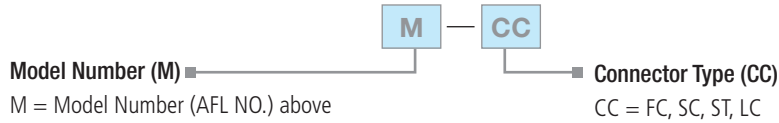
OPTICAL SPECIFICATIONS - POWER METERS									
MODEL	OPM5-4D, OPM4-4D			OPM5-3D, OPM4-3D			OPM5-2D, OPM4-2D		OPM4-1D
Calibrated Wavelengths	850, 980, 1300, 1310, 1490, 1550, 1625 nm			850, 1300, 1310, 1490, 1550, 1625 nm			850, 1300, 1310, 1490, 1550 nm		650, 660, 780, 850 nm
Detector Type	Filtered InGaAs			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 <sup>b</sup>	±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 <sup>b</sup> )		
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 <sup>c</sup>		0 dBm, 9 µm single-mode		0 dBm, 9 µm single-mode <sup>d</sup>		>-20 dBm, 62.5 µm multimode <sup>c</sup>		
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 <sup>a</sup> 60 @ 1310/1550 nm <sup>b</sup>	◆
SMLP4-4	OPM4-2D	OLS4	MM SM	◆	◆	◆		◆		40 @ 850/1300 nm <sup>a</sup> 60 @ 1310/1550 nm <sup>b</sup>	
SLP5-FTTx	OPM5-3D	OLS7-FTTx	SM			◆	◆		◆	70 <sup>b</sup>	◆
SLP5-FTTH	OPM5-4D	OLS7-FTTH	SM			◆	◆	◆		45 <sup>b</sup>	◆
SLP5-7	OPM5-4D	OLS7-3	SM			◆		◆	◆	45 <sup>b</sup>	◆
SLP5-6D	OPM5-4D	OLS2-DUAL	SM			◆		◆		50 <sup>b</sup>	◆
SLP5-6	OPM5-3D	OLS2-DUAL	SM			◆		◆		70 <sup>b</sup>	◆
SLP4-FTTx	OPM4-3D	OLS7-FTTx	SM			◆	◆		◆	70 <sup>b</sup>	
SLP4-FTTH	OPM4-4D	OLS7-FTTH	SM			◆	◆	◆		45 <sup>b</sup>	
SLP4-7	OPM4-4D	OLS7-3	SM			◆		◆	◆	45 <sup>b</sup>	
SLP4-6D	OPM4-4D	OLS2-DUAL	SM			◆		◆		50 <sup>b</sup>	
SLP4-6	OPM4-3D	OLS2-DUAL	SM			◆		◆		70 <sup>b</sup>	
MLP5-2D	OPM5-2D	OLS1-DUAL	MM SM	◆	◆					40 @ 850/1300 nm <sup>a</sup> 22 @ 1300 nm <sup>b</sup>	◆
MLP4-2D	OPM4-2D	OLS1-DUAL	MM SM	◆	◆					40 @ 850/1300 nm <sup>a</sup> 22 @ 1300 nm <sup>b</sup>	

### 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.
<b>LIGHT SOURCE CONNECTOR ADAPTERS</b>	
FC connector adapter	2900-50-0002MR
SC connector adapter	2900-50-0003MR
ST connector adapter	2900-50-0004MR
LC connector adapter	2900-50-0006MR
<b>POWER METER CONNECTOR ADAPTERS</b>	
FC connector adapter	8800-00-0200
SC connector adapter	8800-00-0209
ST connector adapter	8800-00-0202
LC connector adapter	8800-00-0225
<b>ENCIRCLED FLUX (EF) MODE CONTROLLER</b>	
FC to FC, 50/125 $\mu\text{m}$	8700-06-0001MR
FC to FC, 2.5/125 $\mu\text{m}$	8700-06-0002MR
SC to SC, 50/125 $\mu\text{m}$	8700-06-0003MR
SC to SC, 62.5/125 $\mu\text{m}$	8700-06-0004MR
SC to LC, 50/125 $\mu\text{m}$	8700-06-0005MR
SC to LC, 62.5/125 $\mu\text{m}$	8700-06-0006MR
<b>MULTIMODE TEST CORDS (50/125 <math>\mu\text{m}</math> – 2 meters)</b>	
FC/FC	8700-00-0093
SC/ST	8700-00-0064
SC/SC	8700-00-0065
LC/LC	8700-00-0082

DESCRIPTION	AFL NO.
<b>SINGLE-MODE TEST CORDS (9/125 <math>\mu\text{m}</math> – 2 meters)</b>	
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
<b>MATING ADAPTERS (Bulkheads)</b>	
FC/FC	8400-00-0004MR
SC/SC	8400-00-0045MR
ST/ST	8400-00-0020
LC/LC	8400-00-0075
<b>CLEANING SUPPLIES</b>	
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](http://www.AFLglobal.com/Test/Contacts)