# FAFL

# **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<sup>®</sup> 2.0 software
- Fiber identification prior to splicing
- Continuity checking



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

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

OPTICAL SPECIFICATI	ONS - POWER	METERS										
MODEL	OPM5-4D, OPM4-4D OPM			PM5-3D, OPM4-3D			OPM5-2D, OPM4-2D			OPM4-1D		
Calibrated Wavelengths			850, 1300 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	InGaAs			Germanium (Ge)			Silicon (Si)		
Measurement Range	+26 to -50 dBn	n	+10 to -75	+10 to -75 dBm			+6 to -60 dBm			+6 to -70 dBm		
Tone Detect Range	+6 to -30 dBm			+10 to -50 dBm			+6 to -50 dBm			+6 to -45 dBm		
	+6 to -25 dBm	for 850 nm		+10 to -45 dBm for 850 nm			+6 to -45 dBm for 850 nm					
Wavelength ID Range	+6 to -30 dBm			+10 to -50 dBm		+6 to -50 dBm			—			
A	+6 to -25 dBm for 850 nm +10 to -45 dBm for 850 nm +6 to -45 dBm for 850 nm											
Accuracy <sup>b</sup> Resolution	±0.25 dB											
Measurement Units	0.01 dB dB, dBm, μW											
					ub, ubi	π, μνν						
OPTICAL SPECIFICATI			#\	01	C7 FTTU /	Cinala Da			0157.2 /5:ma	le Deut)		
Wavelength (±20 nm)	1310 nm	-FTTX (Single Po 1490 nm	1625 nm			(Single Port) D nm 1550 nm		1310 nn	OLS7-3 (Sing n 1550 n			
Spectral Width	5 nm	3 nm	2 nm	5 nm	3 n		5 nm	5 nm	5 nm	2 nm		
Emitter Type	JIIII	5 1111	2 1111					JIIII	JIIII	Ζ ΙΙΙΙΙ		
Safety Class	Laser 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)											
o alparo tao inty	$\pm 0.03$ db over 1 hour (after 15 minutes warm-up)											
Tone Output	270 Hz, 330 Hz, 1 kHz, 2 kHz											
OPTICAL SPECIFICATI	ONS: OLS4, OL	S2-DUAL & OLS	1-DUAL MOD	ELS								
MODEL OLS4 OLS4 OLS4 OLS2-DUAL						OL	OLS1-DUAL					
	(MM Optical Port)		(9	(SM Optical Port)			(Single Port)			(Single Port <sup>b</sup> )		
Wavelength	850 ±30 nm	1300 +30/-20 r	nm 1310 ±2	20 nm 155	0 ±20 nm	1310 ±	±20 nm   1	550 ±20 nm	850 ±30 nm	1300 +30/-20 nm		
Spectral Width	45 nm (typ)	120 nm (typ)	5 nm (i	max) 5 r	ım (max)		5 nm (m	ax)	45 nm (typ)	120 nm (typ)		
Emitter Type		LED		Laser Lase						LED		
Safety Class	Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03											
Output Power	· · · ·			0 dBm, 9 µm single-mode			0 dBm, 9 µm single-mode <sup>d</sup>			>-20 dBm, 62.5 µm multimode ¢		
Output Stability	±0.1 dB over 8 hours ±0.05 dB over 1 hour (after 15 minutes warm-up) ±0.1 dB over 8 hour											
T 0 + +	(after 5 minutes warm-up) ±0.1 dB over 8 hours (after 15 minutes warm-up) (after 5 minutes w											
	ne Output N/A 2 kHz 270 Hz, 330 Hz, 1 kHz, 2 kHz N/A									N/A		
GENERAL SPECIFICAT	IONS: ALL OPN	I AND OLS MOD	ELS									
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:

a. All specifications valid at 25°C unless otherwise specified.

b. May be used to test 50 or  $62.5 \,\mu m$  fiber with supplied mandrels.

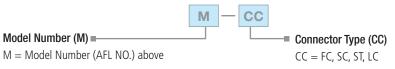
c. Output power will be approximately 3 dB less if a 50 µm mandrel-wrapped jumper is used instead of a 62.5 µm mandrel-wrapped jumper.

d. Adjustable 2 dB.



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

## Part Number – Connector Specification



## Examples:

 $SMLP5-5-SC \Rightarrow (SMLP5-5 \text{ Test Kit with SC adapters})$  $SLP4-6D-LC \Rightarrow (SLP4-6D \text{ Test Kit with LC adapters})$ 

## **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 LIGH		LIGHT	FIBER		LOSS	MEASU	REMENT	S (nm)	DYNAMIC RANGE (dB)	TRM <sup>®</sup> 2.0 PC	
	METER	SOURCE	TYPE	850	1300	1310	1490	1550	1625		REPORTING TOOL
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			•		٠		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 ª 22 @ 1300 nm <sup>b</sup>	•
MLP4-2D	OPM4-2D	OLS1-DUAL	MM SM	•	•					40 @ 850/1300 nm ª 22 @ 1300 nm <sup>b</sup>	

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#### Notes:

a. On 62.5/125  $\mu m$  multimode fiber.

b. On 9/125 µm single-mode fiber.

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

## **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					
Cletop –SB Cassette Cleaner	8500-10-0016MZ					
Cletop –SB Refill Cartridge	8500-10-00017MZ					



## **International Sales and Service Contact Information**

Available at <u>www.AFLglobal.com/NOYES/Contacts</u>

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