

5 YEAR WARRANTY

LED and Laser Light Sources (OLS and CSS1 Series)



OLS7



OLS4



OLS2-DUAL



OLS1-DUAL



CSS-SM

Encircled Flux Options for multimode testing. See "Encircled Flux (EF) Modal Conditioners"

When ordering, specify connector type at the end of model number (e.g. OLS2-DUAL-SC).

All OLS models include protective rubber boot and carry case.

AC adapters are available (ordered separately), see table below.

Model	Output Wavelengths (nm)						Output Ports	Emitter Type ^a	Output Power (nominal, dBm)	Stability	Wave ID Transmit	Available Connectors	Power
	660	850	1300	1310	1490	1550							
OLS1-1C	◆	◆					2	LED	-10 @660 ^b nm -20 @850 nm	± 0.1 dB/8 hrs		ST	9 volt, AC
OLS1-2C		◆	◆				2	LED	-20	± 0.1 dB/8 hrs		ST	9 volt, AC
OLS1-DUAL		◆	◆				1	LED	-20	± 0.1 dB/8 hrs	◆	FC, SC, ST, LC	(2) AA, AC
OLS2-DUAL				◆		◆	1	Laser	0 ^c	± 0.05 dB/1 hr	◆	FC, SC, ST, LC	(2) AA, AC
OLS4		◆	◆	◆		◆	2	LED & Laser	-20 @850 & 1300 nm 0 @1310 & 1550 nm	± 0.05 dB/1 hr	◆	FC, SC, ST, LC	(2) AA, AC
OLS7-3				◆		◆	1	Laser	-5	± 0.05 dB/1 hr	◆	FC, SC, ST, LC	(2) AA, AC
OLS7-FTTH				◆	◆	◆	1	Laser	-5	± 0.05 dB/1 hr	◆	FC, SC, ST, LC	(2) AA, AC
OLS7-FTTx				◆	◆	◆	1	Laser	-5	± 0.05 dB/1 hr	◆	FC, SC, ST, LC	(2) AA, AC
CSS1-MM		◆	◆				1	LED	-20	± 0.1 dB/1 hr		SC (fixed)	(2) AA
CSS1-SM				◆		◆	1	Laser	0	± 0.05 dB/1 hr		FC, SC, ST, LC	(2) AA

Notes:

All Laser output powers are specified into 9/125 μm single-mode fiber.

a. Safety: Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03.

b. 660 nm LED output power specified into 1000 μm fiber. All other LED output powers specified into 62.5 μm fiber.

c. Adjustable 2 dB.

OLS AC Adapters

AFL NO.	Description	OLS1	OLS1-DUAL	OLS2-DUAL	OLS4	OLS7
4050-00-0911	90-264 VAC to 9 VDC, (specify power cord, see page 49 , Table 1)	◆				
4050-00-0919PR	100-240 VAC to 9 VDC, (specify power cord, see page 49 , Table 2)		◆	◆	◆	◆

Connector Adapters (D models starting February 2006)

AFL NO.	Description	OLS1-DUAL	OLS2-DUAL	OLS4	OLS7	CSS1-SM
2900-50-0002MR	FC adapter	◆	◆	◆	◆	◆
2900-50-0003MR	SC adapter	◆	◆	◆	◆	◆
2900-50-0004MR	ST adapter	◆	◆	◆	◆	◆
2900-50-0006MR	LC adapter	◆	◆	◆	◆	◆
8800-00-0072PR	Universal flip-top dust cap for UCI outputs	◆	◆	◆	◆	

5 YEAR WARRANTY

Optical Loss Test Kits (SMLP, SLP, MLP, and CK Series)

Encircled Flux Options for multimode testing. See "Encircled Flux (EF) Modal Conditioners"

Specify one source/adaptor cap connector type when ordering. All test kits include an optical power meter, optical light source, adapter cap, protective rubber boots, user's guide, and carry case. Additional adapter caps may be ordered separately. SMLP5 and MLP5 kits also include TRM® 2.0 Test Results Manager trace analysis/reporting and certification or OPM loss reporting PC software (Basic License). Other test kit configurations are available upon request.



SMLP5-5



SMLP4-4



SLP5-6D



MLP5-2D



MLP4-2D

AFL NO.	Power Meter	Light Source	Fiber Type	Loss Measurements (nm)						Dynamic Range (dB)	Available Connectors	Features		
				660	850	1300	1310	1490	1550			1625	Set Ref.	PC S/W
MLP1-1S	OPM1-2C	OLS1-1C	MM	◆						40 @850 nm ^a	ST			
MLP1-2	OPM1-2C	OLS1-2C	MM SM	◆	◆					40 @850/1300 nm ^a 20 @1300 nm ^b	ST			
MLP4-1D	OPM4-1D	OLS1-1C	MM	◆	◆					40 @850 nm ^a	ST	◆		
MLP4-2D	OPM4-2D	OLS1-DUAL	MM SM		◆	◆				40 @850/1300 nm ^a 22 @1300 nm ^b	FC, SC, ST, LC	◆		◆
MLP5-2D	OPM5-2D	OLS1-DUAL	MM SM		◆	◆				40 @850/1300 nm ^a 22 @1300 nm ^b	FC, SC, ST, LC	◆	◆	◆
SLP4-6	OPM4-3D	OLS2-DUAL	SM				◆	◆		70 ^b	FC, SC, ST, LC	◆		◆
SLP4-6D	OPM4-4D	OLS2-DUAL	SM				◆	◆		50 ^b	FC, SC, ST, LC	◆		◆
SLP4-7	OPM4-4D	OLS7-3	SM				◆	◆	◆	45 ^b	FC, SC, ST, LC	◆		◆
SLP4-FTTH	OPM4-4D	OLS7-FTTH	SM				◆	◆	◆	45 ^b	FC, SC, ST, LC	◆		◆
SLP4-FTTx	OPM4-3D	OLS7-FTTx	SM				◆	◆	◆	70 ^b	FC, SC, ST, LC	◆		◆
SLP5-6	OPM5-3D	OLS2-DUAL	SM				◆	◆		70 ^b	FC, SC, ST, LC	◆	◆	◆
SLP5-6D	OPM5-4D	OLS2-DUAL	SM				◆	◆		50 ^b	FC, SC, ST, LC	◆	◆	◆
SLP5-7	OPM5-4D	OLS7-3	SM				◆	◆	◆	45 ^b	FC, SC, ST, LC	◆	◆	◆
SLP5-FTTH	OPM5-4D	OLS7-FTTH	SM				◆	◆	◆	45 ^b	FC, SC, ST, LC	◆	◆	◆
SLP5-FTTx	OPM5-3D	OLS7-FTTx	SM				◆	◆	◆	70 ^b	FC, SC, ST, LC	◆	◆	◆
SMLP4-4	OPM4-2D	OLS4	MM SM		◆	◆	◆		◆	40 @850/1300 nm ^a 60 @1310/1550 nm ^b	FC, SC, ST, LC	◆		◆
SMLP5-5	OPM5-2D	OLS4	MM SM		◆	◆	◆		◆	40 @850/1300 nm ^a 60 @1310/1550 nm ^b	FC, SC, ST, LC	◆	◆	◆
CKM-2	CSM1-2	CSS1-MM	MM		◆	◆				40 ^a	SC (fixed)	◆		
CKS-2	CSM1-2	CSS1-SM	SM				◆	◆		60 @1310/1550 nm	FC, SC	◆		
CKS-3	CSM1-3	CSS1-SM	SM				◆	◆		70 @1310/1550 nm	FC, SC	◆		
CKSM-2	CSM1-2	CSS1-MM CSS1-SM	MM SM		◆	◆	◆		◆	40 @850/1300 nm ^a 60 @1310/1550 nm ^b	SC	◆		

Notes:

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

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Encircled Flux (EF) Compliant Sources & Test Kits

Encircled Flux (EF) Compliant Light Sources

Since adoption by the IEC, Encircled Flux (EF) multimode launch requirements are increasingly specified into fiber loss testing job requirements. Meeting EF specification requires technicians use EF qualified test sets. It is important to note IEC 61280-1-4 and TIA-568-14-B, specify EF multimode launch conditions at the end of an EF qualified Reference Grade Test Cord (RGTC) – not directly out source test port. Thus, EF compliance requires an EF Light Source and RGTC used together.

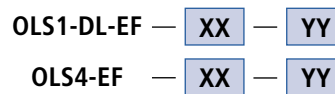
AFL offers multimode Light Sources with designed in Encircled Flux (EF) optics supplied with EF qualified RGTC. Specify RGTC connectors at time of order.

OLS1-DUAL EF is supplied with one multimode RGTC

OLS4 EF is supplied with one multimode RGTC and one standard 9/125 single-mode test cord.

AFL NO.	Wavelengths	Test Cords Included
OLS1-DUAL-EF-XX-YY	MM 850/1300 nm	(1) RGTC, 50 μm, MM, 2-meter
OLS4-EF-XX-YY	MM 850/1300 nm SM 1310/1550 nm	(1) RGTC, 50 μm, MM, 2-meter (1) 9/125 μm, SM, 2-meter

When placing an order, select options as follows:



Source port UCI adapter style (XX)

Input connector of RGTC (XX)

XX = FC, SC

Output connector of RGTC (YY) *

YY = FC, SC, ST, LC



Encircled Flux (EF) Compliant Test Kits

Since adoption by the IEC, Encircled Flux (EF) multimode launch requirements are increasingly specified into fiber loss testing job requirements. Meeting EF specification requires technicians use EF qualified test sets. It is important to note IEC 61280-1-4 and TIA-568-14-B, specify EF multimode launch conditions at the end of an EF qualified Reference Grade Test Cord (RGTC) – not directly out source test port. Thus, EF compliance requires an EF Light Source and RGTC used together.

AFL EF compliant loss test kits include:

Multimode Test Ports: (SMLP and MLP kits)

- Light Source with designed in Encircled Flux (EF) optics paired with one EF qualified RGTC.
- 50/125 μm receive test cord

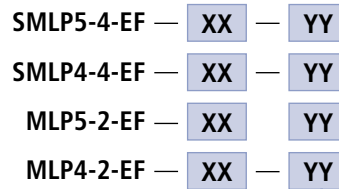
Single-mode Test Ports (SMLP kits)

- Light Source with two 9/125 μm test cords (launch/receive)

AFL NO.	Power Meter	Light Source	WL - λ (nm)	Dynamic Range (dB)	Available Connectors		Included 2-meter Test Cords	
					Source Port	Test Cord	Launch (μm)	Receive (μm)
SMLP5-5-EF-XX-YY	OPM5-2D	OLS4-EF	850, 1300 1310, 1550	40 @850/1300 nm 60 @1310/1550 nm	FC, SC	FC, SC, ST, LC	MM: RGTC, 50/125 SM: 9/125	MM: 50/125 SM: 9/125
SMLP4-4-EF-XX-YY	OPM4-2D	OLS4-EF	850, 1300 1310, 1550	40 @850/1300 nm 60 @1310/1550 nm	FC, SC	FC, SC, ST, LC	MM: RGTC, 50/125 SM: 9/125	MM: 50/125 SM: 9/125
MLP5-2-EF-XX-YY	OPM5-2D	OLS1-DL-EF	850, 1300	40 @850/1300 nm 22 @1300 nm	FC, SC	FC, SC, ST, LC	MM: RGTC, 50/125	MM 50/125
MLP4-2-EF-XX-YY	OPM4-2D	OLS1-DL-EF	850, 1300	40 @850/1300 nm 22 @1300 nm	FC, SC	FC, SC, ST, LC	MM: RGTC, 50/125	MM 50/125

October 15, 2016

When placing an order, select options as follows:



Source port UCI adapter style (XX)

Input connector of RGTC (XX)

XX = FC, SC

Output connector of RGTC (YY) *

YY = FC, SC, ST, LC

Encircled Flux (EF) Reference Grade Test Cords

Encircled Flux (EF) requirements (IEC 61280-1-4 and TIA-568-14-B) specify multimode launch conditions at the end of an EF qualified Reference Grade Test Cord (RGTC). Thus, compliance to EF standards requires both a light source with EF compliant optics and a RGTC.

AFL offers RGTCs with a range of connector options. Note: RGTCs are qualified in one direction and marked accordingly (input/output). Order RGTCs with all output connectors encountered in network testing.

AFL Reference Grade Test Cords use 50 µm OM4 fiber, red jacketing, and come in 2-meter length. Red jacketing used to distinguish RGTCs from standard multimode fiber jumpers.

AFL NO.	Connectors
8700-04-0001MR	FC to FC
8700-04-0002MR	FC to SC
8700-04-0003MR	FC to LC
8700-04-0004MR	FC to ST
8700-04-0005MR	SC to FC
8700-04-0006MR	SC to SC
8700-04-0007MR	SC to LC
8700-04-0008MR	SC to ST

Encircled Flux (EF) Modal Conditioners

Industry specifications TIA-526-14-B and IEC 61280-4-1 Ed. 2.0 define multimode test launch conditions required for testing multimode networks. Modal conditioners provide a convenient and reliable means of bringing multimode sources into compliance with encircled flux specification requirements. Modal Conditioners are available in both 50 micron and 62.5 micron configurations. Each conditioner is supplied with one meter pigtailed.



Encircled Flux Modulator

AFL NO.	Description: Fiber Size, Connectors
8700-06-0001MR	50/125 µm, FC input to FC output
8700-06-0002MR	62.5/125 µm, FC input to FC output
8700-06-0003MR	50/125 µm, SC input to SC output
8700-06-0004MR	62.5/125 µm, SC input to SC output
8700-06-0005MR	50/125 µm, SC input to LC output
8700-06-0006MR	62.5/125 µm, SC input to LC output