FlowScout® Optical Loss Test Kits

Features

- Large color touchscreen with icon-driven user interface
- Rapid pass/fail analysis based on user-set limits
- Wave ID functionality for accuracy and reduced test time
- Rugged design backed by industry-best 5-year warranty
- Internal test results storage
- Reports generation via OPM8 using AFL's FlexReporter™ Suite

Applications

- Enterprise LAN and Data Center fiber networks
- FTTH PON networks
- High power broadband network testing
- Multimode and single-mode fiber networks

AFL's FlowScout Optical Loss Test Kits include the OPM8 optical power meter and FlowScout OLS8 optical light source. These next generation smart optical power meters and optical light sources are designed on the legacy of the AFL/Noyes OPM and OLS series. These inclusive kits provide rapid loss testing with pass/fail results for use in enterprise LAN, data center, PON, and broadband networks.

Intuitive operation: With a simple to use interface based on a color touchscreen, fiber technicians can quickly set-up, test, validate, and document installed fiber plant, as well as provide power measurements. The FlowScout OPM8 measures power levels and automatically evaluates them against user-set min/max limits. The large color touchscreen displays detected power levels with color-coded pass/fail indications.

Wave ID for reduced test time and errors: In the Wave ID mode, the OLS8 optical light source encodes each wavelength with a unique Wave ID code. When the OLS8 is used with a Wave ID capable OPM8 optical power meter, the pair can test up to three wavelengths simultaneously reducing test time and eliminating wavelength-setting errors. The light source also offers CW mode (continuous output - no encoding) and supports test Tone generation (270 Hz, 330 Hz, 1 kHz, 2 kHz) to assist in troubleshooting.

Full reporting capabilities: Measured power levels, pass/fail limits and status can be stored in internal memory for download via USB. Test results may be uploaded for subsequent analysis, editing, and reports generation with FlexReports PC software.

Versatile and efficient: Rugged, ergonomic, and backed by an industry-best 5-year warranty, the hand-held FlowScout OPM8 optical power meter and OLS8 optical light source are the most versatile test set for fiber testing. A range of replaceable output adapters enables access for inspection of optical ports and supports multiple connector styles. Equipped with rechargeable batteries and an AC charger, the FlowScout Optical Loss Test Kits represent a comprehensive and reliable toolset, ensuring accurate and rapid testing across various network environments.

© 2024, AFL, all rights reserved. OLTK-08-2000 Revision AC 2024-10-31
Specifications are subject to change without notice.

AFLglobal.com
1 (800) 235-3423

FlowScout® Optical Loss Test Kits

Product Highlights

- Icon-driven Interface
- Comprehensive Reporting
- Handheld
- Battery Operated
- USB Power Port / Software Upgrades

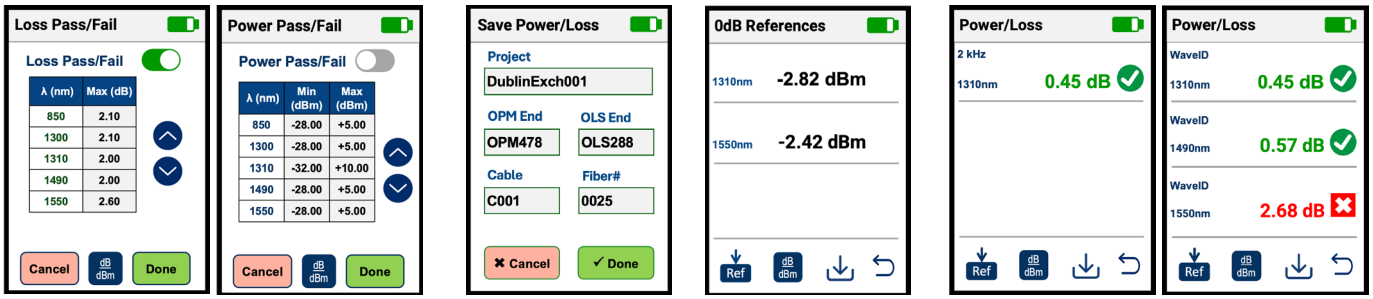
Field-replaceable output adapter
Field-replaceable output adapters to support multiple connector styles.

Large color display
Large color touchscreen, visible in direct sunlight, displays a simple to use user interface.

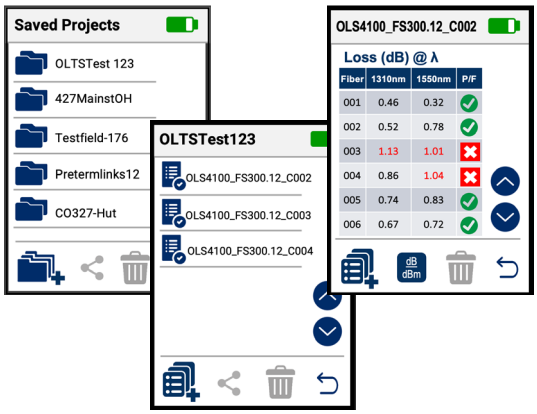
Rapid pass/fail analysis
Measured power levels automatically evaluated against user-set min/max limits.

Durable design for field use
Rugged design backed by an industry-best 5-year warranty.

User Interface Highlights



User-set Power and Loss Pass/Fail Limits | User-set File Naming | Set Reference | Instant Pass/Fail Analysis



Test Results Saved in OPM8 Internal Memory

Test Results Transfer to FlexReports PC Software

© 2024, AFL, all rights reserved. OLTK-08-2000 Revision AC 2024-10-31
Specifications are subject to change without notice.

FlowScout® Optical Loss Test Kits

OPM8 Optical Power Meter Specifications [a,b]

Optical		
Model	**OPM8-H**	**OPM8-L**
Calibrated Wavelengths	850, 980, 1270, 1300, 1310, 1490, 1550, 1577, 1610, 1625, 1650 nm	
Detector Type	Filtered InGaAs	InGaAs
Measurement Range	+26 to -50 dBm	+10 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
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
Measurement Accuracy	± 0.25 dB	
Display Resolution	0.01 dB/dBm	
Measurement Units	dB, dBm	
Tone Detection	Automatically detects 270 Hz, 330 Hz, 1 kHz, 2 kHz	
Wave ID	Automatically detects and measures power & loss at one or more wavelengths using any AFL Wave ID source	
Stored References	Stores separate reference for each calibration wavelength. Displays stored references	
Results Storage	Stores > 1000 results in AFL .ATD (XML) format	
General		
Connector Adapters	SC, FC, ST, LC, 2.5 mm Universal, 1.25 mm Universal	
Power	120/240 VAC input; 5VDC @ 2A output to USB-C	
Battery	User replaceable Li-Pol; IEC 62133-2:2017 and UN38.3 certified	
Battery Operating Time (typical)[c]	16 hours continuous use	
Battery Recharge Time[d]	3 hours	
Operating Temperature	-10 °C to +50 °C, 95% RH (non-condensing)	
Storage Temperature	-30 °C to +60°C, 95% RH (non-condensing)	
IP Rating	IP54	
Shock & Vibration	Withstands 1 m drop test on all 6 sides	
Data Interfaces	USB-C and Bluetooth 5.1 (BLE and Bluetooth Classic)	
Data Storage	Non-volatile memory for field-updateable software and results storage	
Display	3.5 in. color backlit LCD; capacitive touchscreen; 320 X 480 pixels	
Size (H x W x D)	14.0 x 8.0 x 3.3 cm (5.5 x 3.1 x 1.3 in)	
Weight	≤300 g (≤0.66 lb)	
Calibration	N.I.S.T. traceable; ≥3 years between required re-calibration	
Warranty	5 years	

Notes:

a. All specifications valid at 23°C ±2°C unless otherwise specified.

b. Accuracy measured at 25 °C and -10 dBm per N.I.S.T. standards.

c. Operating conditions: Display backlight at minimal brightness, Bluetooth off.

d. Charging time data is provided for USB-C 2A charger.

© 2024, AFL, all rights reserved. OLTK-08-2000 Revision AC 2024-10-31
Specifications are subject to change without notice.

AFLglobal.com
1 (800) 235-3423

FlowScout® Optical Loss Test Kits

OLS8 Optical Light Source Specifications [a], [b]

Optical									
Model	OLS8-QUAD (MM Optical Port)		OLS8-QUAD (SM Optical Port)		OLS8-SM (Single Port)		OLS8-XGS (Single Port)		
Wavelength	850 ±30 nm	1300 ±20 nm	1310 ±20 nm	1550 ±20 nm	1310 ±20 nm	1550 ±20 nm	1310 ±20 nm	1550 ±20 nm	1490 ±20 nm
Spectral Width	45 nm (typ.)	120 nm (typ.)	5 nm (max)						
Emitter Type	LED		Laser						
Safety Class	Class I FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03								
Output Power	≥-22 dBm, 50 µm multimode		-1 dBm, 9 µm single-mode						
Output Stability	±0.1 dB over 8 hours (after 5 minutes warm-up)		±0.05 dB over 1 hour (after 15 minutes warm-up)[e] ±0.1 dB over 8 hours (after 15 minutes warm-up)						
Tone Output	270 Hz, 330 Hz, 1 kHz, 2 kHz								
Wave ID	Supports AFL Wave ID								
General									
Available Adapters	SC FC, ST, LC								
Power	120/240 VAC input; 5VDC @2A output to USB-C								
Battery	User replaceable Li-Pol; IEC 62133-2:2017 and UN38.3 certified								
Operating Time (typical)[c]	10 hours continuous use								
Recharge Time[d]	≤3 hours								
Data Interfaces	USB-C								
Operating Temperature	-10 °C to +50 °C, 95% RH (non-condensing)								
Storage Temperature	-30 °C to +60 °C, 95% RH (non-condensing)								
IP Rating	IP54								
Shock & Vibration	Withstands 1 m drop test on all 6 sides								
Data Storage	Non-volatile memory for field-updateable software and results storage								
Display	3.5 in. color backlit LCD; capacitive touchscreen; 320 X 480 pixels								
Size (H x W x D)	14.0 x 8.1 x 3.3 cm (5.5 x 3.2 x 1.3 in)								
Weight	≤300 g (≤0.66 lb)								
Calibration	N.I.S.T. traceable;≥ 3 years between required re-calibration								
Warranty	5 years								

Notes:

a. All specifications valid at 25°C unless otherwise specified.
b. All OLS models are equipped with SC/UPC port as standard.
c. Operating conditions: 60 tests in 20 minutes, then auto-off; repeat each hour. Display backlight at minimum brightness.
d. Charging time data is provided for USB-C 2A charger.
e. OLS8-Quad output stability specs when using APC connectors.

© 2024, AFL, all rights reserved. OLTK-08-2000 Revision AC 2024-10-31
Specifications are subject to change without notice.

FlowScout® Optical Loss Test Kits

Ordering Information

- All SLP8/SMLP8 test kits include an optical power meter, optical light source, adapter cap, quick reference guide, and carry case.
- All OPM8 models are equipped with 2.5 mm universal adapter caps. If additional caps are required, they can be ordered separately, see Accessories info below.
- All OLS8 models are equipped with SC adapter caps. If additional caps are required, they can be ordered separately, see Accessories info below.
- For Encircled Flux Options for multimode testing see Accessories info below.

AFL NO.	Power Meter	Light Source	Fiber Type	Loss Measurements (nm)					Dynamic Range (dB)
				850	1300	1310	1490	1550	
SLP8-02-[KIT]	OPM8-L	OLS8-SM Dual	SM			◆		◆	69[b]
SLP8-07-[KIT]	OPM8-H	OLS8-SM XGS	SM			◆	◆	◆	49[b]
SMLP8-04-[KIT]	OPM8-L	OLS8-QUAD	MM SM	◆	◆	◆		◆	38 @ 850/1300 nm[a] 69 @ 1310/1550 nm[b]

FlowScout OPM8 and OLS8 Kit Configuration - [KIT]

[KIT]	OPM8 Kit Configuration / Kit Contents
BAS[c]	Includes: OPM8, OLS8, soft case, FlexReports Basic software with 60-day FlexReports Power software trial, USB cable
PLUS	Includes: BAS Kit plus upgrade to FlexReports Power

Notes:

a. On 50/125 µm multimode fiber.
b. On 9/125 µm singlemode fiber.
c. Test results can be off-loaded via USB cable to FlexReports Basic, which provides result viewing and a 60-day trail of the FlexReports Power license. User can opt to upgrade FlexReports Basic to FlexReports Power after purchase. FlexReports Power provides professional reports generation for AFL power meters.

FlowScout OPM8 and OLS8 Adapter Caps

AFL NO.	Connector Adapter Type	Test Port Usage Test Port Usage
2900-63-0002MR	2.5 mm Universal	OPM8
2900-63-0001MR	1.25 mm Universal	
2900-63-0003MR	SC	
2900-63-0006MR	FC	
2900-63-0005MR	ST®	
2900-63-0004MR	LC simplex	
2900-63-0007MR	SC	OLS8
2900-63-0010MR	FC	
2900-63-0009MR	ST®	
2900-63-0008MR	LC simplex	

Encircled Flux (EF) Reference Grade Test Cords

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

AFL NO.	Connectors
8700-04-0006MR	SC to SC
8700-04-0007MR	SC to LC
8700-04-0008MR	SC to ST
8700-04-0028MR	LC to LC

© 2024, AFL, all rights reserved. OLTK-08-2000 Revision AC 2024-10-31
Specifications are subject to change without notice.

AFLglobal.com
1 (800) 235-3423

FlowScout® Optical Loss Test Kits

Recommended Products

FS300

FS200

FlexScan® FS300 (quad) and FS200 (single-mode) OTDRs

- SmartAuto® 1-button automated testing for fast results
- LinkMap® color-coded icons for easy troubleshooting
- FleXpress® mode (FS200) completes OTDR test in <5 seconds!
- Integrated Source, Power Meter and VFL

OFI-BIPM Optical Fiber Identifier

- World-class signal sensitivity
- Trigger lock, positive stop for optimum detection
- Integrated optical power meter option

Qualifications

Category	Regulation/ Standard	Qualification	OPM8	OLS8
CE Marking	EU	Compliant to relevant EU Directives on health, safety, and environmental protection, and certified with CE marking	◆	◆
UKCA Marking	UK	Compliant to relevant UK Directives on health, safety, and environmental protection, and certified with the UKCA marking	◆	◆
Safety/EMC/EMI	IEC	Compliant to IEC 61010-1 for safety requirements for electrical equipment	◆	◆
	EN	Compliant to EN 61010-1 for safety requirements for electrical equipment	◆	◆
	IEC	Compliant to IEC 61326-1 for EMC requirements for electrical equipment	◆	◆
	EN	Compliant to EN 61326-1 for EMC requirements for electrical equipment	◆	◆
	EN	Compliant to EN 55011 for EMC requirements for industrial, scientific and medical equipment	◆	◆
	FCC	Compliant to code of federal regulations FCC 47 CFR 15 on unlicensed transmissions	◆	◆
	FDA	Compliant to code of federal regulations FDA 21 CFR 1040.10 and 1040.11 on laser products		◆
	IEC	Compliant to IEC 60825-1 for safety of laser products		◆
RoHS	EU	Compliant to EU regulations Directive 2011/65/EU (RoHS 2) and Directive 2015/863 (RoHS 3)	◆	◆
Test Method	TIA	Compliant to TIA-568.3-E for test and measurement requirements for optical fiber cabling and components*	◆	◆
	IEC	Compliant to IEC 11801 for test and measurement requirements for optical fiber cabling for use within premises*	◆	◆
	EN	Compliant to EN 50173 for test and measurement requirements for optical fiber cabling for use within premises*	◆	◆
	AS/NZS	Compliant to AS/NZS 3080 for test and measurement requirements for optical fiber cabling for use within premises*	◆	◆
	TIA	Compliant to TIA-526-7 for test procedures for installed optical fiber cable plant	◆	◆
	TIA	Compliant to TIA-526-14 for test procedures for installed optical fiber cable plant*	◆	◆
	IEC	Compliant to IEC 14763-3 for systems and methods for the inspection and testing of installed optical fiber cabling*	◆	◆
	AS/NZS	Compliant to AS/NZS 14763.3 for systems and methods for the inspection and testing of installed optical fiber cabling*	◆	◆
	IEC	Compliant to IEC 61280-4-1 for test procedures for installed optical fiber cable plant*	◆	◆
	IEC	Compliant to IEC 61280-4-2 for test procedures for installed optical fiber cable plant	◆	◆
Generic Requirement	IEC	Compliant to IEC 61315 for requirements on calibration of fiber optic power meters	◆	

* A complementary encircled flux mode conditioner may be needed to comply with encircled flux launch conditions for testing multimode optical fiber cabling and components.

Contact Sales@AFLglobal.com to schedule a demonstration or learn how to buy.

Visit www.AFLglobal.com/Test to learn more about OPM8 optical power meters.

International Sales and Service Contact Information available at www.AFLglobal.com/Test/Contacts.

© 2024, AFL, all rights reserved. OLTK-08-2000 Revision AC 2024-10-31
Specifications are subject to change without notice.