

FlowScout® OPM8 Optical Power Meter

**5 YEAR
WARRANTY**

Features

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

Applications

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



The FlowScout OPM8 optical power meter represents the next generation of smart optical power meters. Designed on the legacy of AFL/Noyes OPMs, the FlowScout OPM8 provides 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: When used with a Wave ID light source, such as the FlowScout OLS8, the power meter automatically synchronizes to source wavelengths, reducing test time and eliminating wavelength setting errors. The broadband power meter also automatically detects and reports the presence of 270 Hz, 330 Hz, 1 kHz, and 2 kHz fiber identifying tones.

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 is the most versatile power meter for fiber testing. A range of replaceable output adapters enables access for inspection and cleaning of optical ports and supports multiple connector styles. Equipped with rechargeable batteries and an AC charger, FlowScout OPM8 can operate while charging from AC.

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FlowScout® OPM8 Optical Power Meter

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

Loss Pass/Fail

Loss Pass/Fail ☒

λ (nm)	Max (dB)
850	2.10
1300	2.10
1310	2.00
1490	2.00
1550	2.60

Cancel dB dBm Done

User-set Power and Loss Pass/Fail Limits

Power Pass/Fail

Power Pass/Fail ☐

λ (nm)	Min (dBm)	Max (dBm)
850	-28.00	+5.00
1300	-28.00	+5.00
1310	-32.00	+10.00
1490	-28.00	+5.00
1550	-28.00	+5.00

Cancel dB dBm Done

Save Power/Loss

Project
DublinExch001

OPM End OLS End
OPM478 OLS288

Cable Fiber#
C001 0025

Cancel Done

User-set File Naming

0dB References

1310nm -2.82 dBm

1550nm -2.42 dBm

Ref dB dBm

Set Reference

Power/Loss

2 kHz

1310nm 0.45 dB ✓

Ref dB dBm

Instant Pass/Fail Analysis

Power/Loss

WaveID

1310nm 0.45 dB ✓

WaveID

1490nm 0.57 dB ✓

WaveID

1550nm 2.68 dB ✗

Ref dB dBm

Saved Projects

- OLSTest 123
- 427MainstOH
- Testfield-176
- PretermLinks12
- CO327-Hut

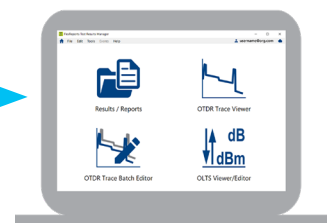
OLS4100_FS300.12_C002

Loss (dB) @ λ

Fiber	1310nm	1550nm	P/F
001	0.46	0.32	✓
002	0.52	0.78	✓
003	1.13	1.01	✗
004	0.86	1.04	✗
005	0.74	0.83	✓
006	0.67	0.72	✓

dB dBm

Test Results Saved in OPM8 Internal Memory



Test Results Transfer to FlexReports PC Software

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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	≤290 g (≤0.65 lb)	
Calibration	N.I.S.T. traceable; ≥3 years between required re-calibration	
Warranty	5 years	

Notes:

- All specifications valid at 23°C ±2°C unless otherwise specified.
- Accuracy measured at 25 °C and -10 dBm per N.I.S.T. standards.
- Operating conditions: Display backlight at minimal brightness, Bluetooth off.
- Charging time data is provided for USB-C 2A charger supported Power Delivery 3.0.

FlowScout® OPM8 Optical Power Meter

Ordering Information

FlowScout OPM8 is available in two models:

- OPM8-L (low power range: +10 to -70 dBm)
- OPM8-H (high power range: +26 to -50 dBm)

All OPM8 models include protective rubber boot, 2.5 mm Universal adapter, rechargeable Li-Pol battery, carry case and data/power cord. Test jumpers and connector adapters are required for operation and must be purchased separately.

AFL NO.	Description
OPM8-SP3-BAS	FlowScout OPM8-L Basic Kit. Includes: FlowScout OPM8-L power meter, AC charger and power cable, user guide, FlexReports Basic software with 60-day Advanced software trial and soft carry case.
OPM8-SP4-BAS	FlowScout OPM8-H Basic Kit. Includes: FlowScout OPM8-H power meter, AC charger and power cable, user guide, FlexReports Basic software with 60-day Advanced software trial and soft carry case.
OPM8-SP3-PLUS	FlowScout OPM8-L Advanced Kit. Includes: FlowScout OPM8-L power meter, AC charger and power cable, user guide, FlexReports Advanced software and soft carry case.
OPM8-SP4-PLUS	FlowScout OPM8-H Advanced Kit. Includes: FlowScout OPM8-H power meter, AC charger and power cable, user guide, FlexReports Advanced software trial and soft carry case.

Accessories

AFL NO.	Description
2900-63-0001MR	1.25 mm Universal adapter cap
2900-63-0002MR	2.5 mm Universal adapter cap
2900-63-0003MR	SC adapter cap for FlowScout OPM8
2900-63-0004MR	LC adapter cap for FlowScout OPM8
2900-63-0005MR	ST adapter cap for FlowScout OPM8
2900-63-0006MR	FC adapter cap for FlowScout OPM8
8800-02-0087MZ	FlowScout OPM8 dust cap
3900-06-0005MR	Battery pack, 3.7V, 3.0 AH, LI-POL, 3 -wire

FlowScout® OPM8 Optical Power Meter

Recommended Products



FlowScout OLS8 Optical Light Source

- Large color touchscreen display with intuitive user interface
- 5-year product warranty
- Integrated LED and laser light sources



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

Qualifications

Category	Regulation/Standard	Qualification
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
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