FlowScout® Downstream PON Power Meter

Features

- Automatically identifies and measures downstream power levels for GPON EPON, RF Video, and XG/XGS/10GEPON.
- Single port for PON and broadband wavelengths
- Evaluates pass/fail against ITU or user-set min/max limits
- Includes broadband power meter with CW, Tone, and Wave ID
- Internal storage for 4000 test results
- Download results via USB
- Reporting with AFL's FlexReporter™ software suite
- Field-replaceable connector adapters

Applications

- Verify power levels during PON activation or troubleshooting
- Measure insertion loss to FTTH PON subscriber
- Perform automatic multi-wavelengths loss measurements
- Detect fiber-identifying tones

AFL's FlowScout Downstream PON Power Meter (DPPM) is designed to automatically detect and simultaneously measure coexistent downstream PON power levels at 1490 nm GPON/EPON and either 1550 nm RF video or 1577 nm XG/XGS/10GEPON.

Intuitive interface for easy operation: The FlowScout DPPM features a large color touchscreen with a simple icon-driven user interface that displays measured power levels with color-coded pass/fail indications. Measured power levels may be automatically evaluated as pass/fail against ITU-T or user-set min/max limits. The FlowScout DPPM uses a single port to automatically detect PON and broadband wavelengths.

Wave ID for reduced test time and errors: The FlowScout DPPM includes a broadband power meter for power and insertion loss measurements. Additional wavelengths can be measured using a companion CW or Wave ID source. When a Wave ID source is used, the power measurement process 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 2kHz 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.

Efficient and durable: Rugged, ergonomic, and backed by an industry-best 5-year warranty, the hand-held FlowScout DPPM power meter includes IP54 weather protection, making it ideal for many conditions. It provides 16 hours of continuous operation from its rechargeable battery and can also be used while charging from the included AC adapter. A variety of field-replaceable output adapters support multiple connector styles. Basic kits include the FlowScout Downstream PON Power Meter in a convenient soft carry case.

AFL
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FlowScout® Downstream PON Power Meter

Product Highlights

- Icon-driven User Interface
- Effortless Operation
- Comprehensive Reporting
- Battery Operated
- USB Power Port / Software Upgrades

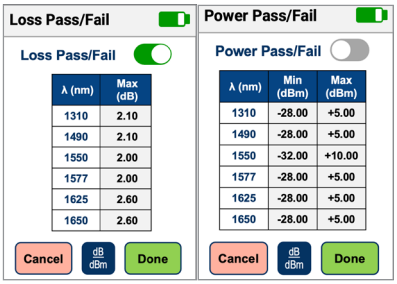
Field-replaceable output adapter
Field-replaceable output adapters to support multiple connector styles.

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

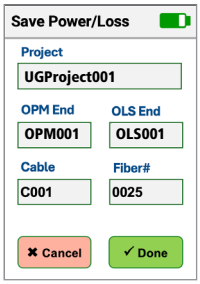
Rapid pass/fail analysis
Measured power levels automatically evaluated against user-set min/max limits.

Durable design for field use
Rugged design

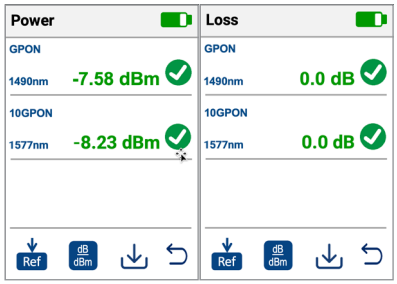
User Interface Highlights



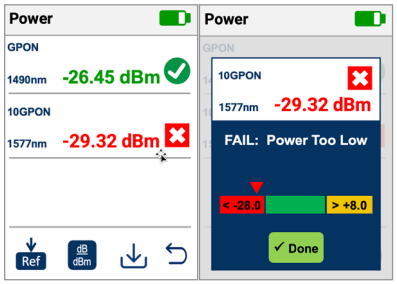
User-set Power and Loss Pass/Fail Limits



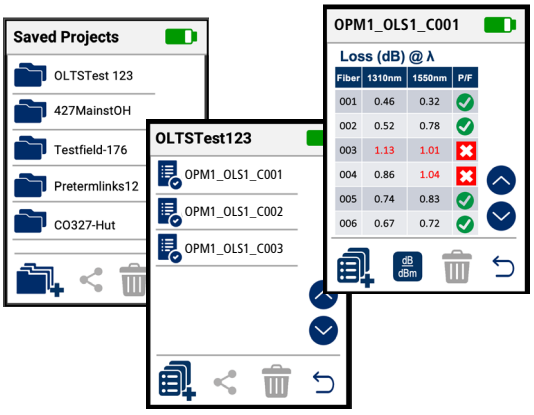
User-set File Naming



Set Reference



Instant Pass/Fail Analysis



Test Results Saved in DPPM Internal Memory

Test Results Transfer to FlexReports PC Software

FlowScout® Downstream PON Power Meter

Specifications [a]

Optical	
Spectral Passband	PON Detector 1: 1480-1500 nm; PON Detector 2: 1540-1580 nm Broadband Detector: 1260 – 1650 nm
Passband Isolation	Detector 1: ≥ 30 dB isolation @ 1270, 1310, 1550, 1577, 1625, 1650 nm Detector 2: ≥ 30 dB isolation @ 1270, 1310, 1490t
Calibrated Wavelengths	PON Detector 1: 1490 nm; PON Detector 2: 1550 & 1577 nm Broadband Detector: 1270, 1310, 1625, 1650 nm
Measurement Range	PON Power Meter: +26 to -45 dBm (1490, 1550, 1577 nm) Broadband Power Meter: +26 to -45 dBm (1260 – 1650 nm)
Measurement Accuracy	±0.35 dB- (within -40 dBm to +23 dBm range)
Display Resolution	0.01 dB/dBm
ORL	≥45 dB
Measurement Modes	Power in dBm, Loss in dB relative to stored reference
Stored references	Stores separate reference for each calibration wavelength Displays stored references
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's Wave ID source
Results Storage	Stores <4,000 results in AFL ATD (XML) file format; Results include test set info, fiber identifying info, timestamp, measured power, wavelength, pass/fail limit, pass/fail status, 0 dB reference power.
Connector Adapters	Includes user-replaceable SC adapter; Accepts FC, LC, ST adapters
General	
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	≤290 g (≤0.65 lb)
Display	3.5 in. color backlit LCD; capacitive touchscreen; 480 x 320 pixels
Data Storage	Non-volatile memory for field-updateable software and approx. 4000 test records results storage
AC Power	120/240 VAC input; 5VDC @ 2A output to USB-C
Battery Power	User replaceable Li-Ion; IEC 62133-2:2017 and UN38.3 certified
Battery Operating Time	16 hours (typical) continuous operation from full charge; Operates while charging
Data Interfaces	USB-C and Bluetooth BLE 5.1
Operating Temperature	-10 °C to +50 °C, 95% RH (non-condensing)
Storage Temperature	-30 °C to +70 °C, 95% RH (non-condensing)
IP Rating	IP54
Shock & Vibration	Withstands 1 m drop test on all 6 sides
CE compliance	IEC-61010 and EMC; RoHS compliant
Calibration	NIST-traceable; ≥3 years between required recalibration
Warranty	5 years

Notes:

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

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FlowScout® Downstream PON Power Meter

Ordering Information

The FlowScout DPPM Downstream PON Power Meter kit includes rechargeable batteries, SC/APC adapter cap, USB-A to USB-C cable for charging and data transfer, AC plug, and carry case. Quick reference guide is available at www.AFLglobal.com.

AFL NO.	Description
DPPM-100-0902PR	Includes: DPPM Downstream PON Power Meter, SC/APC connector adapter, AC charger, and soft carry case
Included Accessories	
2900-52-0002MR	SC connector adapter
8800-00-0072PR	Universal flip-top dust cap for UCI outputs
4050-00-0036MR	AC charger, USB-A, 90-264VAC, 5V 2.5A. Comes with interchangeable US, UK, EU, and CN/AUS power plugs for AC charger.
6000-00-0036MR	USB-A to USB-C charge and data transfer cable
1400-01-0107MZ	Soft carry case with strap

Accessories

AFL NO.	Description
8700-00-0218MR	Single-mode test jumper, SC/APC to SC/APC, conical ferrule, 2 m, 3 mm jacketed
2900-52-0001MR	FC connector adapter
2900-52-0002MR	SC connector adapter
2900-52-0003MR	ST connector adapter
2900-52-0004MR	LC connector adapter
8800-00-0072PR	Universal flip-top dust cap for UCI outputs
1400-05-0230PZ	Wrist strap
4050-00-0036MR	AC charger, USB-A, 90-264VAC, 5V 2.5A. Comes with interchangeable US, UK, EU, and CN/AUS power plugs for AC charger.
6000-00-0036MR	USB-A to USB-C charge and data transfer cable
8500-05-0009MZ	One-Click Cleaner Mini-500 SC, ST, FC, 500+ cleans
1400-01-0107MZ	Soft carry case with strap

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Recommended Products

FOCIS Flex Inspection System

- Self-contained, tether-free, hand-held
- Auto-focus and auto-centering for fast and easy inspection
- IEC, IPC, and user-set pass/fail analysis

FlowScout OLS8 Optical Light Source

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

One-Click® Cleaners

- Patented single-action
- Variety of sizes and types
- Low cost per clean

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
	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 61280-4-2 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

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.