

# FlowScout® Through-Mode PON Optical Power Meter

US Patent 9,602,200 and US Patent 10,771,153



## Features

- Detect multiple wavelengths automatically - NO setup required!
- Detects GPON, XGS-PON, and Video signals all at once
- Rugged and water resistant, IP54 rating
- Field-swappable connector adapters
- Large color touchscreen display daylight viewable
- Rechargeable Li-Polymer battery

## Applications

- Detects and measures PON upstream and downstream signals
- PON network activation
- BPON, EPON, GPON, 10G-EPON, XG-PON, XGS-PON, Video network verification and troubleshooting
- Evaluate PON power level Pass/Fail based on limits

AFL is a trusted supplier of optical testing equipment with more than 30 years of experience and tens of thousands of units in the field. AFL’s full range of N.I.S.T. traceable power meters are used for testing single-mode and/or multimode fiber networks.

**Designed for all:** AFL’s power meters are designed to meet the demands in an outside plant environment. The FlowScout Through-Mode PON Power Meter (TPPM) easily withstands a one-meter drop and has splash resistant controls that are easy to use, even with gloves on.

**Flexible and efficient:** A range of field-swappable output adapters support multiple connector styles and enables access for easy cleaning. The efficient design ensures a long run time from its rechargeable Li-Polymer battery and includes an auto-off feature to save power.

**Stores test results:** The built-in File Management system allows technicians to organize test results into multiple files and transfer them via USB to a PC for analyzing, generating reports, and printing. The FlowScout’s QR code feature can easily collect and transfer test data via any smart devices.

## FlowScout® Through-Mode PON Optical Power Meter

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

OPTICAL			
MODEL		TPPM-XG	
Upstream	Wavelength	1270 nm	1310 nm
	Measurement Range	-28 to +13 dBm	-28 to +13 dBm
Downstream	Wavelength	1490 nm	1550 nm
	Measurement Range	-50 to +13 dBm	-35 to +26 dBm
Accuracy <sup>b</sup>		±0.50 dB @0 dBm	
Resolution		0.01 dB	
Insertion Loss		1.7 dB Typical	
Inline ORL		55 dB typical	
Measurement Units		dBm, µW	

GENERAL	
Power	Rechargeable Li-Polymer battery
Adapter Caps	SC APC standard, LC APC available
Battery Life	>8 hours
Recharge time	~4 hours
Operating Temperature	-10 °C to 50 °C, 95 % RH (non-condensing)
Storage Temperature	-20 °C to 60 °C, 95 % RH (non-condensing)
Size (H x W x D)	17.1 x 10.4 x 4.6 cm (6.75 x 4.1 x 1.8 in)
Weight	0.59 kg (1.3 lb)

#### Notes:

- a. All specifications valid at 25°C unless otherwise specified.  
 b. Accuracy was measured at 25 °C and -10 dBm per N.I.S.T. standards.


### Ordering Information

All models include PON optical power meter, rechargeable batteries, SC/APC adapter cap, two SC/APC-SC/APC jumpers, 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](http://www.AFLglobal.com).

DESCRIPTION	AFL NO.
FlowScout PON optical power meter XGPON/XGSPON	TPPM-XG
<b>INCLUDED ACCESSORIES</b>	
(2) SC/APC to SC/APC Test Jumpers, 2 m	8700-00-0090MR
USB-A to USB-C Charge and Data Transfer Cable	6000-00-0036MR
AC Adapter	4050-00-0034MR
One-Click® Cleaner Mini-500 SC, ST, FC (500+ cleans)	8500-05-0009MZ
<b>AFL ships one power plug (of customer choice) along with the order. Please select one out of the four plugs listed below.</b>	
EU Power Plug for AC charger	4050-00-0034EUMR
US power plug for AC charger	4050-00-0034USMR
CN/AUS power plug for AC charger	4050-00-0034SAAMR
UK power plug for AC charger	4050-00-0034UKMR


## FlowScout® Through-Mode PON Optical Power Meter

### Recommended Products




**Optical Light Sources**

- Encircled Flux Compliant
- 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



**VF14 Visual Fault Identifier**

- Eye-safe Class 3R visible red laser source, 650 nm
- Output power of ≤ 5.0 mW with 10 km range
- Universal connector interface for quick connection

### 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
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-D for test and measurement requirements for premises 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 fibre-optic power meters

Contact [Sales@AFLglobal.com](mailto:Sales@AFLglobal.com) to schedule a demonstration or learn how to buy.

Visit [www.AFLglobal.com/Test](http://www.AFLglobal.com/Test) to learn more about FlowScout PON optical power meters.

International Sales and Service Contact Information available at [www.AFLglobal.com/Test/Contacts](http://www.AFLglobal.com/Test/Contacts)