



OPM5 Optical Power Meter

Features

- Rugged, dependable, and backed by industry-best 5-year warranty
- Wave ID tests up to three wavelengths simultaneously slashing test time
- Field-swappable connector adapters for maximum flexibility
- Long battery life from globally available AA batteries

Applications

- Passive Optical Networks (PON) testing
- OPM(5/4)-4D (Filtered-InGaAs) for high power (+26 dBm) CATV broadband networks or DWDM system applications
- OPM(5/4)-3D (InGaAs) for telecommunications networks
- OPM(5/4)-2D (Ge) for premises LAN/WAN multimode or single-mode networks
- OPM4-1D (Silicon) for multimode/plastic optical fiber applications

AFL is a trusted supplier of optical testing equipment with more than 30 years of experience and tens of thousands of units in use in the field. AFL's full range of power meters are used for testing single-mode and/or multimode fiber networks. Power meters with wave ID can detect two or more wavelengths simultaneously – decreasing test time and reducing user errors when paired with AFL wave ID light sources.

Designed for the real world: AFL's power meters are designed to meet the demands of the outside plant environment. They withstand the one-meter drop test and have splash resistant controls that are easy to use, even with gloves on.

Flexible and efficient: A range of field-swappable output adapters enables access for cleaning optical ports and supports multiple connector styles. The efficient design provides long test time from globally available AA batteries. Equipped with five-minute auto-off feature to save power.

Reduce test time and errors: Wave ID (Triple, Dual, or Single) decreases test time while reducing technician errors.

Stores test results: AFL's OPM5 stores optical reference at each calibrated wavelength. This enables technicians to organize test results into multiple files and transfer stored results via USB to the included PC-based TRM® 2.0 software for analyzing, generating reports, and printing. Users can generate network Pass/Fail results demonstrating compliance to industry standards and illustrate headroom. Fully N.I.S.T. traceable.



Specifications ^a

OPTICAL						
MODEL	OPM5-4D, OPM4-4D	OPM5-3D, OPM4-3D	OPM5-2D, OPM4-2D	OPM4-1D		
Calibrated Wavelengths	850, 980, 1300, 1310, 1490, 1550, 1625 nm	850, 1300, 1310, 1490, 1550, 1625 nm	850, 1300, 1310, 1490, 1550 nm	650, 660, 850 nm		
Detector Type	Filtered InGaAs	InGaAs	Germanium (Ge)	Silicon (Si)		
Measurement Range	+26 to -50 dBm	+10 to -75 dBm	+6 to -60 dBm	+6 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	+6 to -50 dBm +6 to -45 dBm for 850 nm	+6 to -45 dBm		
Wavelength ID Range	+6 to -30 dBm +6 to -25 dBm for 850 nm	+6 to -50 dBm +6 to -45 dBm for 850 nm	_			
Accuracy ^b	±0.1 dB (typical); ±0.25 dB					
Resolution	0.01 dB					
Measurement Units	dB, dBm, μW					

GENERAL					
Power	2 x AA batteries, accepts standard mini-USB power adapter				
Adapter Caps	Order with one: 1.25 mm Universal, 2.5 mm Universal, FC, SC, ST, LC. Other connector adapters available				
Battery Life	300 hours				
Operating Temperature	-10 °C to 50 °C, 95 % RH (non-condensing)				
Storage Temperature	-30 °C to 60 °C, 95 % RH (non-condensing)				
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	0.26 kg (0.58 lb)				

Notes:

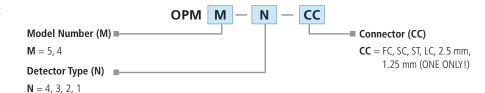
- a. All specifications valid at 25°C unless otherwise specified.
- b. Accuracy measured at 25 $^{\circ}\text{C}$ and -10 dBm per N.I.S.T. standards.

Ordering Information

All OPM models include optical power meter, 2 AA batteries, protective rubber boot, customer specified adapter cap, and carry case. OPM5 models also include TRM® 2.0 software (Basic License).

When placing an order, select options as follows:

- Model Number (M)
- Detector Type (N)
- Connector Configuration (CC)



	CALIBRATED WAVELENGTHS (nm)						nm)					
MODEL	650	660	850	980	1300	1310	1490	1550	1625	DETECTOR TYPE	MEASUREMENT RANGE (dBm)	PC SOFTWARE
OPM5-4D			•	•		•	•	•	•	InGaAs	+26 to -50	TRM 2.0
OPM5-3D			•		•	•	•	•	•	InGaAs	+10 to -75	TRM 2.0
OPM5-2D			•		•	•	•	•		Germanium	+6 to -60	TRM 2.0
OPM4-4D			•	•		•	•	•	•	InGaAs	+26 to -50	
OPM4-3D			•		•	•	•	•	•	InGaAs	+10 to -75	
OPM4-2D			•		♦	•	♦	•		Germanium	+6 to -60	
OPM4-1D	•	•	•							Silicon	+6 to -70	



OPM Accessories

DESCRIPTION					
ADAPTER CAPS					
2.5 mm Universal (accepts FC, SC, and ST ferrules)					
1.25 mm Universal (accepts LC and MU ferrules)			8800-00-0224		
FC			8800-00-0200		
SC					
SL _®					
LC simplex					
E-2000					
2.5 mm open Universal. Accepts SC duplex, OptiTap connector for measuring optical power.					
SMA					
D4					
Biconic					
USB CABLE					
USB Cable: PC (USB-A) to OPM (USB-MINI B):	OPM5 MODEL	OPM4 MODEL	6000-00-0024MR		
 Connect OPM to PC for data upload to TRM® 2.0 External Power for OPM (when used with customer supplied USB-A power source) 	Connect to PC and External power	External power only			

Test Management and Reporting Software

DESCRIPTION	AFL NO.
TRM® 2.0 with Basic License (OTDR Trace/OLTS Viewer, Batch Editor and Reports), USB delivery	TRM-00-0900PR



Recommended Products



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



Optical Light Sources

- Encircled Flux Compliant
- 5-Year Product Warranty
- Integrated LED and Laser light sources

Qualifications

CATEGORY	REGULATION/STANDARD	QUALIFICATION
CE Marking	EU	Compliant to relevant EU Directives on health, safety, and environmental protection, and certified with CE marking
	IEC	Compliant to IEC 61010-1 for safety requirements for electrical equipment
	EN	Compliant to EN 61010-1 for safety requirements for electrical equipment
Safety/EMC/EMI	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)
	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
Test Method	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 to schedule a demonstration or learn how to buy.

Visit www.AFLqlobal.com/Test to learn more about OPM5 and OPM4 optical power meters.

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