

# AF-OLK5A Series Fiber Optic Test kit

Product:OLK5A

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Rev: 05

## Description

The AF-OLK5A series test kits are the complete solution necessary for the installer to test, terminate and trouble shoot fiber optic systems. These test kits are designed to allow testing of all parameters of fiber optic networks, including output power levels from the fiber, coupled source power and attenuation loss in a cable.

The AF-OLK51A-MM is a test kit designed for multimode applications while the AF-OLK51A-SM test kit is designed to test single-mode fiber optic cable. The AF-OLK52A-D is designed for both multimode and single-mode applications. The AF-OLK5A series test kits come with the **AF-OM100A** series power meter. The meter is accompanied with the AF-OS420 for multimode applications and AF-OS430 for single-mode applications. A custom test kit can be made for any application. All kits include a carrying case, one connector adapter, cleaning wipes, power adjustment tool and instructional manual.



The **AF-OM100A** series is the latest addition to the AFS product line. This OM100 series upgrade includes a number of new enhancements with such features as the addition of Watts readout and an extra digit of dB resolution going from 0.1dB to 0.01dB which is selectable by the end user. This upgraded OM100A line also sees the introduction of the **OM150A** replacing the OM130 for FTTx applications with calibrated wavelengths at 850/1300/1310/1490/1550 and 1625nm. The OM150A will be the only meter that you will ever need! The **OM150A** utilizes a filtered InGaAs photodiode that is potted in a aluminum detector housing for high optical power heat dispersion.

Kit Highlights and Key Features	
◦ Compact light weight carrying case	◦ 0.1dB/0.01dB Resolution (Selectable)
◦ 850nm, 1300nm, 1310nm, 1490nm, 1550nm & 1625nm	◦ Meter calibration certificate included
◦ dBm/W (absolute) + dB (relative) measurement	◦ Display back light
◦ Graphical display with testing guide	◦ Auto power off
◦ Zero reference with dBm value displayed	◦ N.I.S.T. traceable
◦ dBm and Watts displayed simultaneously	◦ Single mode and multimode applications
◦ Optional: 2mm and 3mm Ger detector available for larger core applications	

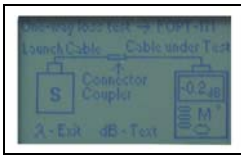
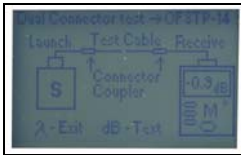
## AF-OM100A Series Power Meter Description

All of the Advanced Fiber Solutions power meters are the perfect tools for measuring optical power, loss (attenuation) and optical return loss in any system, it is just a matter of picking the right instrument for the application. All meters are calibrated at industry standard wavelengths (NIST traceable) for both single-mode and multimode transmitters. All detectors are potted in a threaded housing for versatility and allows the user to interchange adapters for numerous connector types. The AF-OM100A series meters are a low cost series of power meters for the technician who wants a high performance meter. All power meters now come with protective rubber boot.



AF-OM100 Series Power Meter

**Highlighted Feature:** All our power meters features an on screen testing procedure guide field for quick reference making testing a breeze!

On Screen Testing Procedure Guides	
 <p>One Way Loss Test</p>	 <p>Two way loss testing guide</p>

## AF-OS400 Series Light Source Description

The AF-OS400 series sources offer a complete line of sources for any testing application. Whether testing outside plant or premise an AF-OS400 series optical source will be perfect when combined with an AF-OM100 series optical power meter. On each source all wavelengths are individually adjustable allowing the user to use less battery power when high optical output power is not necessary, or to turn up the power to test long runs. This also makes it possible for the AF-OS420 LED source to test single-mode cables up to 5km at 1300nm.



OS400 Series Power Meter

Optical Specification	AF-OM120A	AF-OM150A
Calibrated Wavelengths	850nm, 1300nm, 1310nm, 1490nm & 1550nm	850nm, 1300nm, 1310nm, 1490nm, 1550nm & 1625nm
Measurement Range	+3dBm to -55dBm @1310nm	+20dBm to -40dBm @1310nm
Detector Type	Germanium (Ge)	InGaAs High Power
Applications	Single-mode, Multimode, Outside plant and Premise	Single-mode, Long wavelengths, CATV
All Units		
Accuracy (@25°C, -20.0dBm)	±0.25 dB	
Measurement Units	dBm/W (absolute) - dB (relative)	
Resolution	0.1 dB/0.01dB (Selectable)	
Controls	5 Soft Buttons	
Buttons	On/Off, Backlight, λ, dB-dBm/W, Zero Reference	
Power	2AA Batteries or AC Power Converter	
Low Battery Indicator	Yes	
Display	Graphical LCD with Backlight	
Adaptor Options	ST, SC, FC, 2.5mm Universal & LC (other adapters also available)	
Auto-Shutdown	Yes	
Protective Rubber Boot	Yes	
Testing Reference Guide	Yes	
Enclosure Size	Compact Handheld (L-4.94"/W-2.75"/H-1.2")	

Temperature Specifications	
Operation Temperature	-10°C to +50°C (45% Hum, non condensing)
Storage Temperature	-20°C to +60°C (75% Hum, non condensing)

# Technical Specifications OS400 Series Light Sources

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Optical Specification	AF-OS420	AF-OS430
Wavelengths ( $\lambda$ )	850nm & 1300nm	1310nm & 1550nm
Wavelength Range	850nm $\pm$ 30nm 1300nm $\pm$ 30nm	1310nm $\pm$ 5nm 1550nm $\pm$ 5nm
Output Type	LED	Laser
Applications	Premises, campus cabling networks with multimode	Single mode, outside plant and long haul applications
Output Power	>-20.0dBm @850 & 1300 Into 62.5 micron fiber	>-8.0dBm @1310 & 1550 Into single mode fiber
Stability per hour (after 5 min warm up)	Less than 0.05 dB	Less than 0.05 dB
Connector Style	ST 1300nm ST 850nm	ST/FC or SC
Modulated Frequencies	N/A	2Khz
<b>All Units</b>		
Protective Rubber Boot	Yes	
Enclosure Size	Compact Handheld (L-4.94"/W-2.75"/H-1.2")	

<b>Temperature Specifications</b>	
Operation Temperature	-10°C to +50°C (45% Hum, non condensing)
Storage Temperature	-20°C to +60°C (75% Hum, non condensing)

Kit Part Number	Meter	Source	Application
AF-OLK51A-MM	AF-OM120A	AF-OS420	Multimode
AF-OLK51A-SM-ST	AF-OM120A	AF-OS430-ST	Single Mode
AF-OLK51A-SM-FC	AF-OM120A	AF-OS430-FC	Single Mode
AF-OLK51A-SM-SC	AF-OM120A	AF-OS430-SC	Single Mode
AF-OLK52A-D-ST	AF-OM120A	AF-OS430-ST, AF-OS420	Single Mode, Multimode
AF-OLK52A-D-FC	AF-OM120A	AF-OS430-FC, AF-OS420	Single Mode, Multimode
AF-OLK52A-D-SC	AF-OM120A	AF-OS430-SC, AF-OS420	Single Mode, Multimode
AF-OLK53A-SM-ST	AF-OM150A	AF-OS430-ST	CATV Single Mode
AF-OLK53A-SM-FC	AF-OM150A	AF-OS430-FC	CATV Single Mode
AF-OLK53A-SM-SC	AF-OM150A	AF-OS430-SC	CATV Single Mode
AF-OLK53A-D-ST	AF-OM150A	AF-OS430-ST, AF-OS420	CATV Single Mode, Multimode
AF-OLK53A-D-FC	AF-OM150A	AF-OS430-FC, AF-OS420	CATV Single Mode, Multimode
AF-OLK53A-D-ST	AF-OM150A	AF-OS430-SC, AF-OS420	CATV Single Mode, Multimode
<b>Kit Content</b>			
Meter, Source, AD-100 (2.5mm adapter), Batteries, Alco wipes, Trim tool, Manual, Meter calibration cert.			

Note: Advanced Fiber Solutions, Inc offers a full line of connector adapters along with accessory options such as our new 200 power optical inspection microscope. Please contact a distributor for more information.