Newson		
Product: OLK5N <sup>NextGen</sup>	Date: Nov:2013	Rev: 01

## Description

The AF-OLK5N<sup>NextGen</sup> series test kits are the latest addition to the AFS product family. This inexpensive optical test kit is the complete solution necessary for the installer to test and trouble shoot both multimode and single mode 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-OLK51N-MM is a test kit designed for multimode applications while the AF-OLK51N-SM test kit is designed to test single-mode fiber optic cable. The AF-OLK52N-Q is



designed for both multimode and single-mode applications. The AF-OLK5N<sup>NextGen</sup> series test kits come with the AF-OM120N-I series power meter. The meter is accompanied with the AF-OS420N 850/1300nm LED light source for multimode applications or/and AF-OS430N 1310/1550nm laser source for single-mode applications (AF-OS430N comes equipped with interchangeable ST, FC and SC connector adapters).

All kits include the AF-OM120N-I power meter which incorporates such features as a enlarged screen for optimal viewing, extended battery life (100+ hours), tone detection (270Hz, 330Hz, 1KHz & 2KHz), dBm\dB\Watts read out and an auto off feature (optional 10 or 30 min). The unit utilizes an InGaAs detector and its calibrated wavelengths include 850/1300/1310/1490/1550 &1625nm. All wavelengths have a **Set Reference** feature which stores selected wavelengths absolute value to memory.

This is one of the most cost effective and easy to use insertion loss test kits on the market today.

Kit Highlights and Key Features				
0	Compact light weight carrying case	0	0.1dB/0.01dB Resolution (Selectable)	
0	850nm, 1300nm, 1310nm, 1490nm, 1550nm & 1625nm	0	Meter calibration certificate included	
0	dBm/W (absolute) + dB (relative) measurement	0	Display back light	
0	Extended Graphical display for optimal viewing	0	Auto power off (10 or 30 min option)	
0	Zero reference with dBm value displayed	0	N.I.S.T. traceable	
0	dBm and Watts displayed simultaneously	0	Single mode and multimode applications	
0	Set Reference Feature for all calibrated wavelengths	0	Dynamic range ~+6 to -60dBm	

Unit Specification			
Calibrated Wavelengths 850nm, 1300nm, 1310nm, 1490nm, 1550nm & 1625nm			
Measurement Range ~+6dBm to -60dBm			
Detector Type	1mm InGaAs		
Accuracy (@25°C, -20.0dBm)	±0.25 dB		
Measurement Units	dBm (absolute)\Watts\dB (relative)		
Resolution	0.1 or 0.01 dB		
Controls	5 Soft Buttons		
Buttons	On/Off, Backlight, λ, dB-dBm, Zero Reference		
Tone Detection	Yes $\rightarrow$ 270Hz, 330Hz, 1KHz & 2KHz Note: to~-30dBm		
Power	1x9V 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)			

Optical Specification	AF-OS420N		AF-OS430N	
Wavelengths (λ)	850nm & 1300nm		1310nm & 1550nm	
Wavelength Peak	$850 \text{nm} \pm 30 \text{nm}$ $1300 \text{nm} \pm 30 \text{nm}$		1310nm ± 10nm 1550nm ± 10nm	
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 *	>-5.0dBm @1310 & 1550 Into single mode fiber *	
Stability per hour (after 5 min warm up)		Less than 0.1 dB	Less than 0.1 dB	
Connector Style	ST 1300nm ST 850nm		ST/FC & SC (Interchangeable)	
Modulated Frequencies	N/A		2Khz	
Battery	1x9V		1x9V	
Emitter Type	Class 1 LED Product		Class 1 Laser Product	
All Units				
Protective Rubber Boot Yes		Yes		
Enclosure Size	Enclosure Size Compact Handheld (L-4.94"/W-2.75"/H-1.2")		ld (L-4.94"/W-2.75"/H-1.2")	

<sup>\*</sup>Side adjustable trim pots for output power level adjustment

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

## **Ordering Information**

Kit Part Number	Meter	Source	Application
AF-OLK51N-MM	AF-OM120N-I	AF-OS420N	Multimode
AF-OLK51N-SM	AF-OM120N-I	AF-OS430N	Single Mode
AF-OLK52N-Q	AF-OM120N-I	AF-OS430N AF-OS420N	Single Mode, Multimode
<b>Model Part Number</b>	Meter	Source	Application
.AF-OM120N-I	850/1300/1310/1490 1550&1625nm		Single Mode, Multimode
AF-OS420N		850/1300nm LED source	Multimode
AF-OS430N		1310/1550nm Laser source	Single Mode

Kits include: Meter, Source(s), AD-100 (2.5mm adapter), Batteries, Alco wipes, Manual, Meter calibration cert.