# Fiber OWL 7V SM Test Kit

Part #: KF7VSX

## Overview

Many fiber optic network bids and Requests For Quote (RFQ) are citing cabling standards to specify the set of guidelines (such as fiber length) that the network installer must follow during the network installation. Adherence to such standards is meant to ensure the quality of the installation and guarantee that the network will perform as it was designed.

The process of testing a network installation to ensure its adherence to specified standards is called certification, and often requires hard-copy documentation as proof of adherence to standards.

The **Fiber OWL 7V SM Test Kit** contains the tools necessary for certifying fiber optic links against a myriad of popular cabling standards in singlemode networks, commonly referred to in the industry as Tier 1 certification.

The **Fiber OWL 7V (p/n: F7V)** optical power meter is multimode and singlemode ready, and contains a user-friendly Fiber Link Wizard with color diagrams to guide the setup process, calculate the link budget, and set the optical reference. Up to 10,000 fiber runs may be stored in internal memory, and can be downloaded to a PC for report generation with OWLView software.

Intelligent automated testing functions include automatic dual-wavelength storage and auto-wavelength recognition which reduce testing time and human error.

The universal detector port on the **F7V** comes with 2 adapter caps, one for 2.5mm connectors such as SC, ST, and FC, and the other for 1.25mm connectors such as LC. The length testing port and visual fault locator are LC.

The **WaveSource Pro SM (p/n: WPSX)** fiber optic light source is designed for accurate testing and certification of singlemode (1310nm & 1550nm) networks. Its dual-wavelength outputs are temperature-stabilized for accurate measurements.

The **WPSX** has a built-in auto-wavelength switching protocol designed to synchronize the wavelength of the **F7V** with the current output wavelength.

The light source comes configured with SC connector ports.



**Power Meter:** Fiber OWL 7V (p/n: F7V)
**Light Source:** WaveSource Pro SM (p/n: WPSX)
Patch cables, adapters, and other related accessories not included.

**Accessories:**
Hard-shell carrying case
Protective rubber boots
USB download cables and battery chargers
USB flash drive containing OWLView software and product documentation
NIST certificate of calibration

## Applications

- Full-featured Tier 1 fiber link certification
- Optical loss (attenuation) measurement
- Optical power measurement
- Continuity testing
- Patch cord verification
- Fiber optic link length measurement

**Factory located in the Heartland of America**

## Features

- Standards-based link certification for singlemode fiber links
- Color LCD indicates PASS / FAIL status based on color
- Unlimited job configurations
- User-friendly Link Wizard with helpful color on-screen diagrams to help guide the setup process
- Auto-wavelength recognition and data storage reduces testing time and human error
- Up to 10,000 test readings can be stored in memory
- Integrated length tester for accurate end-to-end link length measurements, a critical factor for link budget calculation
- Prints official certification reports via OWLView certification software
- Re-chargeable Lithium Polymer battery
- NIST Traceable

## Optical Wavelength Laboratories

MANUFACTURER OF QUALITY OPTICAL FIBER TEST EQUIPMENT

**20 Years**

**O**ptical **W**avelength **L**aboratories (OWL)
N9623 Old Hwy 12 • Whitewater, WI 53190
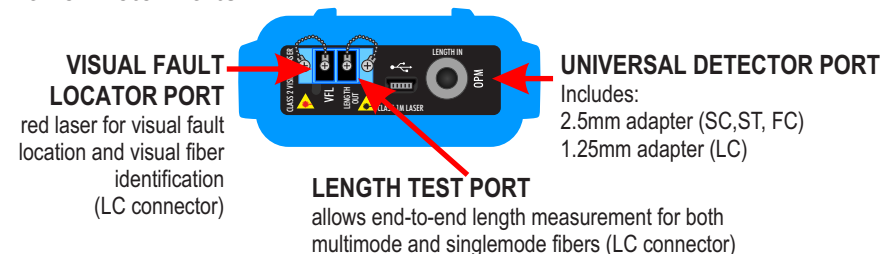Phone (262) 473-0643 • Fax: (262) 473-8737
http://OWL-inc.com

# Fiber OWL 7V SM Test Kit

Part #: KF7VSX

## FIBER OWL 7V OPTICAL POWER METER (P/N: F7V)

| Key Specifications | |
|---|---|
| Detector Type | InGaAs |
| Calibrated Wavelengths[1] | **850**, 980, **1300**, **1310**, 1490, **1550**, 1625 |
| Measurement Range | +5 to -70 dBm |
| Accuracy | ±0.15 dB |
| Display Resolution | 0.01 dB |
| Battery Life | Up to 50 hours (Lithium Polymer) |
| Detector Connector Type | 2.5mm/1.25mm universal |
| Data Storage | Up to 10,000 data points |
| Displayed Measurement Units | dBm, dB, mW, µW, nW |
| Modes of Operation | CERT, LOSS, OPM |
| Length Test Range / Accuracy | up to 25 km /  ±2.5 m |
| Length Tester Connector Type | LC |
| Display Type | Hi-resolution Color LCD |
| Auto-shutdown | Yes |
| Operating Temperature | -10 to 55° C |
| Storage Temperature | -30 to 70° C |
| Dimensions | 2.9 x 4.49 x 1.3 in. (72.9 x 112.3 x 31.8 mm) |
| Weight | 12 oz. (373g) |
| Visual Fault Locator Specifications | |
| Output Wavelength: | ~650nm |
| Output Power: | 0 dBm (1mW) |
| Operating Modes: | CW/Flash |
| Connector Type: | LC |

1: Bold wavelengths are NIST Traceable
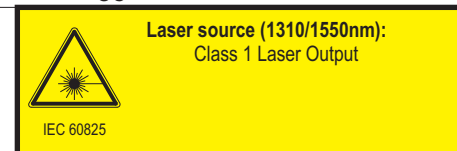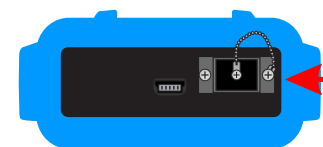Conforms to the Harmonized European Standards EN 61326-1 and EN 61010-1.

## WAVESOURCE PRO SM LIGHT SOURCE (P/N: WPSX)

| Key Specifications | |
|---|---|
| Output Type | Singlemode |
| Launch Method | FP Laser |
| Center Wavelength | 1310 nm: 1310 ± 20 nm |
| | 1550 nm: 1550 ± 30 nm |
| Spectral Width | 1310nm: 2 nm |
| | 1550nm: 2 nm |
| Output Power | -10 dBm |
| Output Modes | CW / Modulated |
| Initial Accuracy | ± 0.1 dB |
| Battery Life | Up to 150 hours (re-chargeable Lithium Polymer) |
| Operating Temp. | 0 to 55° C |
| Storage Temp. | 0 to 75° C |
| Dimensions | 2.87 x 4.42 x 1.25 in. (72.9 x 112.3 x 31.8 mm) |
| Weight | 10 oz. (284g) |
| Connector Type | SC |

Conforms to the Harmonized European Standards EN 61326-1 and EN 61010-1.

**Laser source (1310/1550nm):**
Class 1 Laser Output

IEC 60825

## Light Source Ports



**SINGLEMODE SOURCE PORT**
Wavelengths: 1310/1550nm
Connector Type: SC

## Power Meter Ports



**VISUAL FAULT LOCATOR PORT**
red laser for visual fault location and visual fiber identification (LC connector)

**UNIVERSAL DETECTOR PORT**
Includes:
2.5mm adapter (SC,ST, FC)
1.25mm adapter (LC)

**LENGTH TEST PORT**
allows end-to-end length measurement for both multimode and singlemode fibers (LC connector)

## Supported Cabling Standards

| | | | | |
|---|---|---|---|---|
| **TIA** | 568-C.3 | 568-3.D | | |
| **ISO** | 11801 | 14763-3 | | |
| **Ethernet** | 1G | 10G | 40G | 100G |
| **FTTH** | Class A | Class B | Class C | |
| **USER DEFINED** | Fixed budget | | Calculated budget | |



N.I.S.T. TRACEABLE

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