

# Fiber OWL 7V SM/VFL Test Kit

Part #: KF7VSV

Singlemode Tier 1 Certification Test Kit w/integrated VFL

## 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/VFL 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 can 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/VFL (p/n: WPSV)** 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 **WPSV** has a built-in auto-wavelength switching protocol designed to synchronize the wavelength of the **F7V** with the current output wavelength, and its integrated VFL port allows for easy visual fault location and visual fiber identification.

The light source comes configured with SC connector ports.



**Power Meter:** Fiber OWL 7V (p/n: F7V)  
**Light Source:** WaveSource Pro SM/VFL (p/n: WPSV)  
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
- Visual Fault Location



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



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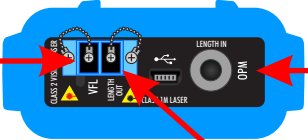
## FIBER OWL 7V OPTICAL POWER METER (P/N: F7V)

Key Specifications	
Detector Type	InGaAs
Calibrated Wavelengths <sup>1</sup>	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 10000 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.

## 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)

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

Key Specifications		
Output Type	Visual (Red)	Singlemode
Launch Method	Laser	FP Laser
Center Wavelength	~650nm	1310 nm: 1310 ± 20 nm 1550 nm: 1550 ± 30 nm
Spectral Width	–	1310nm: 2 nm 1550nm: 2 nm
Output Power	0 dBm	-10 dBm
Output Modes	CW / Modulated	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.



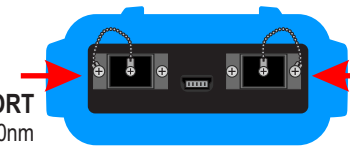
**Laser source (1310/1550nm):**  
Class 1 Laser Output

**Visual Fault Locator (635~650nm):**  
Class 2 Laser Output  
Do NOT stare into beam.

IEC 60825

## Light Source Ports

**VISUAL FAULT LOCATOR PORT**  
Wavelength: ~650nm  
Connector Type: SC



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



## 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	



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