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 / Laser OWL Test Kit* contains the tools necessary for certifying fiber optic links against a myriad of popular cabling standards in single mode networks.

The *Fiber OWL optical power meter* is multi-mode and single mode ready, and contains a user-friendly Fiber Link Wizard that performs link budget calculation, and sets a reference value using the characteristics of the link. This reference is the PASS/FAIL threshold and is calculated against the chosen standard. Up to 900 fiber runs may be stored, and serially downloaded to a PC for report generation using our OWL Reporter software.

The Fiber OWL is available in two configurations. The Fiber OWL 2+ has a measurement range of +5 to -70 dBm, and the Fiber OWL 2C+ has a measurement range of +25 to -50 dBm.

The *Laser OWL* is our single mode light source. Its dual wavelength outputs (1310nm / 1550nm) are temperature-stabilized for accurate measurements. Three connector options are available (ST, SC, and FC). The Laser OWL is also available with 2.5mm Universal connectors, but is not included with this kit for physics reasons.



Kit Contents

Power Meter: Fiber OWL

Light Source: Laser OWL

Accessories: OWL Reporter software

Product manuals

Download cable

9-volt batteries

NIST certificate

Features

- Certification of single mode fiber links at 1310nm and 1550nm
- Data storage for up to 900 data points including run labels, fiber type, and link information including link name, date, reference power values, fiber length, and number of splices and interconnects
- Built-in loss wizard for calculation of maximum allowable loss values (link budget)
- RS-232 interface for continuous data logging, report printing, or data downloading
- OWL Reporter software for printing formatted fiber certification reports
- Absolute or relative mode for giving you instant pass/fail results
- Selectively view, delete or resample data points

Supported Cabling Standards:

 EIA/TIA 568-B
 ISO/IEC 11801

 1000Base-SX
 1000Base-LX

 100Base-FX
 10Base-FB

 10Base-FL
 FDDI

 ATM-155
 ATM-622

 Fibre Channel
 Token Ring

Also supports 2 user-definable standards

Additional Measurement Wavelengths:

850nm 980nm 1300nm 1480nm











Specifications

Fiber OWL Optical Power Meter

Detector Type Ge (2mm)

Supported Fiber Types 62.5/125 µm multi-mode 50/125 µm multi-mode

100/140 µm multi-mode 7-9/125 µm single mode

Calibrated Wavelengths 850nm, 980nm,

1300nm / 1310nm,

1550nm

Additional Wavelengths 1480nm

Measurement Range +5 to -70 dBm (FO2+)

+25 to -50 dBm (FO-2C+)

 Accuracy
 ±0.15 dB

 Resolution
 0.01 dB

Battery Life up to 200 hours (9V)
Connector Type 2.5mm Universal

Data Storage Points up to 900

Download Data Points OWL Reporter Software

 $\textbf{Power Units Displayed} \quad \text{dBm, dB, } \mu W$

Modes of Operation Simple / Certification

Battery Capacity Display Yes
Backlight Yes
NIST Traceable Yes
Auto-shutdown Yes
Serial Port Diagnostic Yes

Operating Temperature -10 to 55 C
Storage Temperature -30 to 70 C

 Width
 3.48"

 Height
 6.48"

 Depth
 1.1"

Weight 373g (12 oz.)

Laser OWL Single Mode Laser Source

Launch Method	FP Laser
Connector	ST, SC, or FC
Center Wavelength (1310nm)	1310 ±30nm
Center Wavelength (1550nm)	1550 ±30nm
Spectral Width (FWHM; 1310 / 1550 nm)	2 nm
Output Power (9µm core)	-10.0 dBm
Initial Accuracy	0.1 dB
Fiber Type	Single Mode
Battery Life	25 hrs.
Battery Capacity Display	Yes
Operating Temperature	0 to 55° C
Storage Temperature	0 to 75° C
Width	2.75"
Height	4.94"
Depth	1.28"
Weight	154g

Product manuals come in PDF format on CD. Adobe Acrobat Reader $^{\text{TM}}$ is required to view these documents.

Patch cables are available for an additional charge. Call 262-473-0643 for more information.

Protective rubber boots for the Fiber OWL are not yet available.

