## **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 *Micro OWL+ / Dual OWL 850st Test Kit* contains the tools necessary for certifying fiber optic links against the 568-B cabling standard in multi-mode networks at 850nm.

The *Micro 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 1000 fiber runs may be stored, and serially downloaded to a PC for report generation using our OWL Reporter software.

The Micro OWL+ is available with two connector types:

- -- 2.5mm / 1.25 Universal (2mm Ge detector). Adapter end is removable, and can be replaced by a 1.25 mm universal adapter for use with LC connectors.
- --- 2.5mm Universal (1mm Ge detector). Adapter end is fixed.

Universal adapters connect to ST, SC, and FC without changing caps.

The **Dual OWL 850st** is our NIST traceable 850nm multimode light source. Its 850nm output is temperature-stabilized for accurate measurements. It comes configured with an ST connector.



# Kit Contents

Power Meter: Micro OWL+

Light Source: Dual OWL 850st

Accessories: OWL Reporter software

Product manuals
Download cable
9-volt batteries
NIST certificate
Carrying case

## **Features**

- Certification of multi-mode fiber links at 850nm
- Data storage for up to 1000 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

#### Additional Measurement Wavelengths:

1300nm 1310nm 1550nm

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.



NIST Traceable





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# **Specifications**

### **Micro OWL+ Optical Power Meter**

**Detector Type** Ge (1mm, 2.5mm Univ. fixed)

Ge (2mm, 2.5mm/1.25mm Univ.)

**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, 1300nm / 1310nm,

1550nm

Measurement Range +5 to -70 dBm

 Accuracy
 ±0.15 dB

 Resolution
 0.01 dB

Battery Life up to 100 hours (9V)

**Connector Type** 2.5mm removable (Universal+)

2.5mm fixed (FX+)

**Data Storage Points** up to 1000

**Download Data Points** OWL Reporter Software

Power Units Displayed dBm, dB, µW

**Battery Capacity Display** Yes

Backlight Yes
NIST Traceable Yes
Auto-shutdown 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.)

## **Dual OWL Multi-mode Light Source**

**LED Launch Method** Connector ST or SC Center Wavelength (850nm) 850 ±20nm Spectral Width (FWHM) 35 nm Output Power (62.5µm core) -20.0 dBm **Initial Accuracy** 0.1 dB **Fiber Type** Multi-mode **Battery Life** 40 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

