Stand-alone Optical Power Meters

Multimode
Singlemode

Description

The Fiber OWL 4 is a highly accurate hand-held optical power meter, capable of performing a wide range of functions from simple optical power and loss measurements to standards-based link certification. Its built-in Link Wizard walks the user through a series of steps, prompting the user to pick the parameters of their link under test, and sets an optical reference based on these parameters. This optical reference is used as a point of reference by which a link will PASS or FAIL against the chosen fiber standard. When used with OWL WaveSource fiber optic light sources, the Fiber OWL 4 provides fiber optic professionals with automatic wavelength switching so that the meter and light source are always set to the same wavelength, and automatic dual-wavelength storage cuts down on testing time and human error. Up to 1000 fiber runs can be stored in memory, and can be downloaded to a PC using our free OWL Reporter software via the supplied serial cable. OWL Reporter displays fiber tests in either a summary or detail view, and prints out professional certification reports that can be passed along to customers as proof of link certification. Data can also be saved to hard disk for later retrieval. A 2.5mm universal and 1.25mm universal connector port are included to connect to a wide variety of popular fiber optic connectors, including SC, ST, FC, LC, and SFF. A filtered detector option is available for high-power applications such as CATV and telco ("C" versions), and the Fiber OWL 4 BOLT ("B" versions) comes configured with an integrated length tester used for accurate optical length measurement of a fiber link. The Fiber OWL 4 is enclosed in high-impact plastic, and a protective rubber boot provides additional shock protection. It's large backlit display is easy to read, and the 18-key pad allows for easy data entry. It can be used in many test environments, including LAN, MAN, WAN, FTTH, Telco, CATV, Manufacturing, and Laboratory.

Applications include:

– Certification Testing
– Attenuation Testing
– Optical Loss Testing
– Active Equipment Optical Power Testing
– FTTH Link Loss Verification
– Patch Cord Testing

Specifications

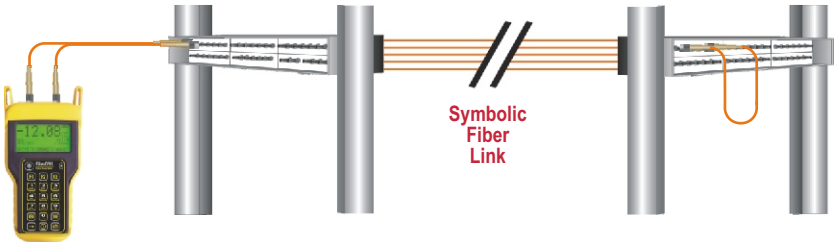
NIST-traceable Wavelengths (nm)	850, 1300, 1310, 1550 980, 1490, 1625
Measurement Range (dBm; FO-4/FO-4B)	+5 to -70
Measurement Range (dBm; FO-4C/FO-4BC)	+25 to -50
Accuracy (dB)	±0.15
Resolution (dB)	0.01
Battery Life (hours)	up to 100 (9V)
Detector Port	Universal 2.5/1.25mm
Dimensions	3.48" x 6.48" x 1.1"
Weight	12 oz. (373 g)

Ordering Info

FO-4	Fiber OWL 4 optical power meter	895.00
FO-4B	Fiber OWL 4 BOLT optical power meter	1400.00
FO-4C	Fiber OWL 4C optical power meter	940.00
FO-4BC	Fiber OWL 4C BOLT optical power meter	1445.00
U2.5-4	Replacement 2.5mm universal connector port	35.00
U1.25-4	Replacement 1.25mm universal connector port	35.00

The Fiber OWL 4 BOLT uses OWL's optical length testing technology as a unique, low-cost alternative for users who need to measure the length of optical fibers. Fiber installations are increasingly required to have fiber length measurements to comply with bid requirements. Kits including the Fiber OWL 4 BOLT fit the bill nicely. The length tester in the Fiber OWL 4 BOLT implements a "round-robin" method of measuring fiber length. This is accomplished by looping back two fibers at one end of the fiber run with a patch cord. The round trip time that the light takes to travel through both fibers is converted to length in kilometers, then divided by two to show the length of the fiber cable. There is no need to measure the length of all the fibers; the length measurement can be applied to all fibers in the cable. This method of length testing provides accurate measurements, and saves time and money. Measuring fiber by the jacket or manual length measurement are accepted methods of measurement; however, there are many scenarios where this may not be possible. Length markings may be hard to reach if they are already terminated in a patch panel, and links that contain multiple interconnects would need each segment inspected for jacket markings. Optical measurement of fiber produces accurate results without the need for jacket markings or manual length measurement.

Optical Length Measurement



NOTE: the Fiber OWL 4 BOLT is not an OTDR-like device. It does not measure distance to a fault, but measures the total length of a fiber link based on a two-fiber loopback method.