

Description

The FiberWizard is an optical time domain reflectometer, designed to provide a complete fiber media test set in one rugged, portable, easy-to-use unit. It has the capability to detect backscattered (reflected) light in optical fibers, measure fiber attenuation, evaluate splice and connector joints, and locate faults.

The FiberWizard has fiber test features, instrument functions and performance capabilities similar to mainframe OTDRs, but in a smaller package. Fiber test features include the ability to test singlemode or multimode fiber, run FAS (Fiber Analysis Software), and perform single- and dual-wavelength tests. Instrument functions include flexible data-averaging modes, multiple loss measurement, trace overlay, and data storage capabilities. The instrument has high dynamic range with combined long range and high resolution electronics for FTTH, CATV and LAN applications.

Other standard features on the FiberWizard include a high-contrast, 7 inch, backlit LCD display, battery or AC operation, and MS-DOSr file format compatibility. Loss test set functions are available on some models. A Visual Fault Locator option is available, also.

OPTICAL PERFORMANCE	FIBERWIZARD TD-1000X/HR	
Center Wavelength ³	<i>Singlemode</i> TD-1000XA: 1310/1550nm ±20nm TD-1000XC: 1550nm ±20nm	
Maximum Spectral Width ³	≤20nm	
Fiber Type	Singlemode 9/125μ	
Distance Range	1.2km; 5km; 10km; 20km; 40km; 82km; 164km	
Data Resolution	Singlemode: 0.313m, 0.625m, 1.25m, 2.5m, 5m, 10m, 20m	
Distance Accuracy ⁸	0.0025% X distance ± distance resolution	
Vertical Linearity	±0.1 dB/dB to within 8 dB of the 98% noise floor	
Real Time Display Update	2/second	
Dynamic Range ^{4,5} (typical) (SNR=1)	Dynamic Range (SNR=1) 1310nm 1550nm 33.5 dB 34 dB	Measurement Range 1310nm 1550nm 26.5 dB 27 dB
Initial Reflective Deadzone (typical)	Singlemode: 3m @ 1310nm; 3.5m @ 1550nm	
Initial Non-Reflective Deadzone (typical)	Singlemode: 15m @ 1310nm; 20m @ 1550nm	
Display	7 inch diagonal (14 X 11.4cm) LCD with backlight	
Vertical Scale Setting	0.063/0.125/0.25/0.5/1/2/4 dB/div.	
Horizontal Scale Setting	@ 1.2km: .0061 to .2044 km/div @ 81km: .1022 to 13.0789 km/div.	
Power Meter	Range: Standard: 10 dBm to -65 dBm Optional: 20 dBm to -55 dBm (Option - with AM-460 filter)	
Light Source	Modes: CW, 1kHz & 2kHz Wavelength: 1310nm, 1550nm, or 1310/1550nm Power Output: -10 dBm (typical) Stability: 0.2 dB @ 8 hours (@25° C)	
Visual Fault Locator (optional) Range	630nm Class II Laser Source up to 3km	
Connector Type: OTDR	Universal SPC Connector interface accepts adapters for all singlemode & multimode connector types.	
Connector Type: Power Meter	Connector interface accepts adapters for all connector types. Consult factory for details.	

OPTICAL PERFORMANCE	FIBERWIZARD TD-1000X/HR
Dimensions & Weight ⁶	11.5"H X 8.25"W X 4.5"D (292 X 209 X 114mm) / 9 Lbs. (4.1kg)
Power Requirements ⁷ Power Supply Battery Power	90-240VAC @ 44-65Hz, Auto switching Sealed Lead Acid Battery Pack, 8 hours typical; 2 hours minimum
Environmental Operating Storage	Temperature: 0° to 40°C (32° to 104°F), Humidity: 95% RH max. non-condensing, Maximum Altitude: 15,000 feet Temperature: -20° to 60°C (-4° to 140°F), Humidity: 95% RH max. non-condensing, Maximum Altitude: 50,000 feet
Laser Safety	CDRH Class 1 (eye safe) ⁹
Data Storage	3.5 inch, 1.44 MB, High Density, DOS® type disk