

NOYES® M310 Data Center OTDR

Designed for Data Center Testing, Troubleshooting and Documentation



M310 OTDR with DFS1 Digital FiberScope

Features

- Event Dead Zone 0.8 m
- Attenuation Dead Zone <3 m
- Front Panel and First Connector Check
- Touch and Test® intuitive user interface
- Inspection capable with DFS1 Digital FiberScope
- 16-hour battery life
- Rugged, hand-held, lightweight (<1 kg)
- Live fiber detection

Test Modes

- Full Auto OTDR – Auto set-up for quick and easy instrument set-up for fiber cable construction testing and fault location
- Expert OTDR – Full function OTDR for precision test set-ups includes Auto and Auto-Once setup options
- Real-Time OTDR – Fast fault location and splice verification
- Optical Power Meter – Measure optical power or fiber loss
- Visual Fault Locator – Red laser for fiber bend and break location

Languages supported

- English
- Italian
- Portuguese
- French
- Polish
- Turkish
- German
- Spanish
- Chinese (Simplified, Traditional)

Data centers and enterprise networks have evolved in ways that create more demanding testing of optical cables. The M310 has the short dead zones required to test these networks. The sheer number of cable runs to be tested in modern data centers requires automated detection, and measurement of all events in each cable, provided by the M310 with its accurate and reliable event analysis. The M310's Enhanced Event Analysis software is a product of NOYES' extensive research into the properties of fiber optic cable events, and provides a new level of accuracy and reliability in event analysis.

The M310 has controlled mode fill for multimode fiber testing without the need of an external mode controller, providing link loss measurements comparable to a mode conditioned light source and power meter. Short dead zones, mode controlled launch, OPM, VFL and inspection capability make this the most complete OTDR for Data Center testing and troubleshooting. Rugged, lightweight, easy to hold, the M310 has the Touch and Test user interface, making it easy for experts and novices to test and document fiber networks accurately and quickly. The M310 is available in multimode, single-mode and QUAD models. The M310 Single-mode and QUAD models can be ordered with Advanced Analysis software which includes Macro/Microbend detection and Bi-directional trace analysis. Using the Advanced Analysis software and testing against industry ISO/TIA standards or user set Pass/Fail thresholds, technicians are alerted to installation problems and failures.

NOYES[®] M310 Data Center OTDR

Basic Specifications

OTDR	MULTIMODE	SINGLE-MODE
Center Wavelengths	850/1300 nm	1310/1550 nm
Dynamic Range (SNR = 1)	30/30 dB	38/37 dB
Event Dead Zone	0.8 m	0.8 m
Attenuation Dead Zone	2.5/2.7 m	3.0 m
OPM (STANDARD)		
Calibrated Wavelengths	850, 1300, 1310, 1490, 1550, 1625, 1650 nm (displays up to 3 simultaneously)	
Display Range	+6 to -70 dBm	
Accuracy @ -10 dBm	±0.25 dB	
Resolution	0.01 dB	
Measurement Units	dB, dBm, mW	
Tone Detection	270 Hz, 330 Hz, 1 kHz, 2 kHz	
VFL (STANDARD)		
Emitter Type	Laser	
Safety Class	Class II FDA 21 CFR 1040.10 and 1040.11; IEC 825-1:1993, 60825-1:2007-03	
Wavelength	635 nm ±20 nm	
Output Power	0 dBm (1 mW)	
GENERAL		
Display Type	3.5-inch transfective color, high contrast, high reflectivity (20%) for optimum indoor/outdoor viewing with touchscreen	
Display Resolution	QVGA 240 x 320	
Size (in boot)	23 x 11 x 7 cm (8.8 x 4.3 x 2.8 in)	
Weight	<1.0 kg (< 2.0 lb)	
Power	Removable Li-ion or AC/DC power adapter (input 100-240 V, ~1.5 A 47-63 Hz) output 18 V DC/3.6 A (can test while charging, can operate on AC with battery removed)	
Operating Temperature	-18°C to +50°C	
Storage Temperature	-30°C to +60°C	
Relative Humidity	0 to 95 % RH (non-condensing)	
DFS1 DIGITAL FIBERSCOPE SUPPORT		
Field of View	400 x 300 µm	
Optical Resolution	4 µm	
Detection Capability	2 µm	

M310 Models and Included Adapters

WAVELENGTHS (nm)				DYNAMIC RANGE (dB)	OTDR PORT ADAPTERS	OPM PORT ADAPTERS	AFL BASE MODEL NO.
850	1300	1310	1550				
◆	◆	◆	◆	30/30/38/37	SC, FC, ST	SC, 2.5 mm Universal	M310-25
◆	◆			30/30	SC, ST	SC, 2.5 mm Universal	M310-22
		◆	◆	38/37	SC, FC	SC, 2.5 mm Universal	M310-20

All M310 OTDRs include a USB flash drive, AC adapter, UCI switchable test port adapters, TRM[®] 2.0 (Basic License) and quick reference guide.



NOYES International Sales and Service Contact Information

Available at www.AFLglobal.com/NOYES/Contacts