

The Lightwave OTDR

The Digital Lightwave LW OTDR is a truly portable, easy-to-use mini-OTDR for testing today's metro and broadband fiber networks.

The Digital Lightwave LW OTDR™ (Optical Time Domain Reflectometer) is a rugged, field-portable, and user friendly mini-OTDR. When equipped with single- and multi-mode modules, it is the ideal OTDR for technicians and contractors who test and fault-locate premise, access, metro, and broadband fiber networks.

The LW OTDR tests an optical fiber link, while having access to only one end of it, by generating short pulses of light—sampling reflected light as a function of time, and converting those samples into a graph or “trace” of insertion loss versus distance.

Based on the shape of the trace, the LW OTDR can locate and analyze fiber link “events” such as connections, splices, bends, and breaks. Traces can be saved to internal non-volatile memory, a removable mass

storage device capable of storing more than 1500 traces, or floppy disks.

The LW OTDR may be equipped with a Visual Locator—Red (VLR) module. The LW VLR™ module is a 650 nm visible red laser source designed to trouble-shoot faults on fiber-optic cables.



Lightwave OTDR (LW OTDR)

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The Lightwave (LW) product series is a comprehensive line of handheld and ultra-compact test equipment for measuring, maintaining, and documenting the physical-layer performance of fiber-optic networks.

Major Features

- Single-mode (1310/1550 nm) and/or multi-mode (850/1300 nm) configurations
- Automatic or manual setup
- Real-time testing
- Large, backlit, color display
- Keyboard with full-sized keys for fast text entry
- Trace storage on 3.5" diskettes, a flash card (more than 1500 traces), and internal memory
- Trace analysis software for Windows® and Windows NT® 4.0
- Available fiber boxes (launch and receive cables)
- Available LW OTDR—LW VLR module

General Specifications

Display	High-resolution color, 7.4", adjustable contrast	Operating Temperature	0° to 40° C
Distance Display Units	m, km, ft, mi	Storage Temperature	-10° to 60° C
Power	Lead acid rechargeable battery or AC	Relative Humidity	0 to 95% non-condensing
File Transfer to PC	3.5" floppy disk or flash card	Dimensions (H x W x D)	10.5 x 10.75 x 4.5 in (26.6 x 27.3 x 11.4 cm)
Connector Type	SC or ST	Weight in Use	<10 lb (<4.5 kg)

LW OTDR Optical Specifications

Center Wavelengths	1310/1550 nm
Fiber Type	Single-mode
Dynamic Range	26/26 dB
Emitter Type	Laser
Emitter Classification	Class 1 (FDA 21 CFR 1040.10 and 1040.11)
Display Resolution	0.1 m
Event Dead Zone	5 m
Attenuation Dead Zone	15 m
Index of Refraction	1.400 to 1.699

LW M600-MM1 Optical Specifications

Center Wavelengths	850, 1300
Fiber Type	Multi-mode
Dynamic Range	21/23 dB
Emitter Type	Laser
Emitter Classification	Class 1 (FDA 21 CFR 1040.10 and 1040.11)
Event Dead Zone	5 m
Attenuation Dead Zone	15 m
No. Traces Stored	50/501

Specifications are subject to change without notice.



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Ordering Information For feature availability, ordering, and pricing information, call +1 727 442 6677 or visit www.lightwave.com.

Digital Lightwave provides industry-leading products, technologies, and services for deploying and managing communications networks. Telecommunications service providers and equipment manufacturers rely on our offerings to develop, install, maintain, and manage high-performance networks. With a presence in more than 80 countries, Digital Lightwave enables customers to successfully implement global communications networks worldwide. To find the nearest sales office, please visit www.lightwave.com.

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