



## **LA OTDR Module**

T-BERD®/MTS-2000, -4000, -5800 Platforms

The Viavi Solutions LA OTDR module provides technicians with the ideal test tool for characterizing and maintaining point-to-point networks including premises, FTTH fiber distribution/drop cabling, and FTTA fronthaul.

The LA OTDR module features fast acquisition time, good resolution, and up to 35 dB dynamic range for installing and maintaining fiber links. Its integrated light source, accessible through the OTDR port, enables quick fiber identification without switching ports. The integrated power meter adds loss-testing capabilities.

The LA module's optical performance, combined with comprehensive T-BERD/MTS platform features, ensures testing is done right, the first time.

Standard test features include:

- Automatic macrobend detection
- Summary results table with pass/fail analysis
- Bidirectional OTDR analysis
- FastReport onboard report generation

## **Key Features and Benefits**

- Up to 35 dB dynamic range
- Single- and dual-wavelength 1310, 1550, and 1650 nm versions
- In-service 1650 nm wavelength (filtered version)
- Integrated CW light source and power meter (not available on filtered version)
- Ready for SLM, FTTA-SLM, and FTTH-SLM intelligent optical application software
- Instantly detects traffic upon connecting live fiber



T-BERD/MTS-2000 one-slot handheld modular platform for testing fiber networks



T-BERD/MTS-5800\* handheld test instrument for testing 10 G Ethernet and fiber networks



T-BERD/MTS-4000 two-slot handheld modular platform for testing fiber, copper, and multiple services

## **Specifications**

General (Typical at 25°C)		
Weight	0.35 kg (0.77 lb)	
Dimensions (w x h x d)	128 x 134 x 40 mm	
Optical Interfaces	·	
Interchangeable optical connectors	FC, SC	
Technical Characteristics		
Laser safety class (21CFR)	Class 1	
Distance units	Kilometers, feet, and miles	
Group index range	1.30000 to 1.70000 in 0.00001 steps	
Number of data points	Up to 128,000 data points	
Distance measurement	Automatic or dual cursor	
Display range	1 to 260 km	
Cursor resolution	1 cm	
Sampling resolution	4 cm	
Accuracy	±1 m ±sampling resolution ±1.10 <sup>-5</sup> x distance (excluding group index uncertainties)	
Attenuation Measurement		
Automatic, manual, 2-point, 5-point,	and LSA	
Display range	1.25 to 55 dB	
Display resolution	0.001 dB	
Cursor resolution	0.001 dB	
Linearity	±0.05 dB/dB	
Threshold	0.01 to 5.99 dB in 0.01 dB steps	
Reflectance/ORL Measurements		
Reflectance accuracy	±2 dB	
Display resolution	0.01 dB	
Threshold	–11 to –99 dB in 1 dB steps	
CW Source (not available on filtered version)		
CW source output power level	-3.5 dBm	
Operating Modes	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz, TWINTest	
Power Meter Option (not available on filtered version)		
Power level range	−2 to −50 dBm	
Calibrated wavelengths	1310, 1550 nm	
Measurement accuracy	±0.5 dB	

LA OTDR Module (Typical at 25°C)			
Central wavelength <sup>1</sup>	1310 ±20 nm	1550 ±20 nm	1650 ±20 nm
Pulse width	5 ns to 20 μs	5 ns to 20 μs	5 ns to 20 μs
RMS dynamic range <sup>2</sup>	35 dB	33 dB	30 dB
Event dead zone <sup>3</sup>	1.5 m	1.5 m	1.5 m
Attenuation dead zone <sup>4</sup>	6 m	6 m	6 m

- 1. Laser at 25°C
- 2. The one-way difference between the extrapolated backscattering level at the start of the fiber and the RMS noise level, after 3-minutes averaging.
- 3. Measured at  $\pm 1.5$  dB down from the peak of an unsaturated reflective event.
- 4. Measured at  $\pm 0.5$  dB from the linear regression using an FC/UPC-type reflectance.

## **Ordering Information**

Description	Part Number	
LA OTDR Modules and Option		
LA 1550 nm OTDR	E4115LA	
LA 1310/1550 nm OTDR	E4126LA	
LA filtered 1650 nm OTDR	E4118RLA65	
Power meter	E41OTDRPM	
Universal Optical Connectors		
Straight connectors	EUNISPCFC, EUNISPCSC	
8° angled connectors	EUNISAPCFC, EUNISAPCSC	

For more information on T-BERD/MTS-2000, -4000, and -5800 test platforms, please refer to their respective data sheets and the family product brochure.

Contact your Viavi representative for additional information regarding your specific needs.



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To reach the Viavi office nearest you, visit viavisolutions.com/contacts.

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