



# 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

\*Compatible with models -5811P/L and -5822P.

## 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 ±1.5 dB down from the peak of an unsaturated reflective event.
4. Measured at ±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	E410TDRPM
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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