



MP OTDR Module

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

The Viavi Solutions MP OTDR module provides the optimum performance that fiber installers and service providers need to test metro, cable TV (CATV), and FTTH networks with high-port-count splitters.

With various wavelength combinations including filtered wavelengths for in-service testing, an improved dynamic range, and optimized resolution and dead zones at short pulses, the MP module is the ideal OTDR to test any PON system with up to a 1x128 splitting ratio.

The MP module's optical performance, combined with the T-BERD/MTS platform's complete suite of features, ensures that testing is done right the *first* time.

Standard testing features include:

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

Key Features

- Up to 43 dB dynamic range and 256,000 acquisition points
- PON-optimized to test up to a 1x128 splitter
- Single-, dual-, and tri-wavelength versions with 1310/1490/1550/1625/1650 nm
- Single connector port for 1310, 1550, and in-service 1625 nm or 1650 nm wavelengths
- Integrated CW light source and power meter
- FiberComplete™ compatible
- Ready for SLM, FTTA-SLM, and FTTH-SLM intelligent optical application software
- Instantly detects traffic when connected to 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 TBERD/MTS-5811P/L, -5822P.

Specifications

General (typical at 25°C)	
Weight	0.35 kg (0.77 lb)
Dimensions (w × h × d)	128 x 134 x 40 mm (5 x 5.28 x 1.58 in)
Optical Interfaces	
Interchangeable optical connectors	FC, SC, DIN, LC and ST
Technical Characteristics	
Laser safety class (21 CFR)	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 256,000 data points
Distance measurement	Automatic or dual cursor
Display range	0.5 to 260 km
Cursor resolution	1 cm
Sampling resolution	4 cm
Accuracy	±1 m ±sampling resolution ±1.10 ⁻⁵ x distance (excluding group index uncertainties)
Attenuation Measurement	
Automatic, manual, 2-point, 5-point, and LSA	
Display range	1.25 dB to 55 dB
Display resolution	0.001 dB
Cursor resolution	0.001 dB
Linearity	±0.03 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	
CW Source output power level	-3.5 dBm
Power Meter (optional)	
Power level range	0 to -55 dBm
Calibrated wavelengths	1310, 1490, 1550, 1625, and 1650 nm
Measurement accuracy	±0.5 dB

MP OTDR (typical at 25°C)					
Central wavelength ¹	1310 ±20 nm	1490 ±20 nm	1550 ±20 nm	1625 ±10 nm	1650 ±20 nm
Pulse width	3 ns to 20 µs				
RMS dynamic range ²	43 dB	41 dB	41 dB	41 dB	40 dB
Event dead zone ³	80 cm				
Attenuation dead zone ⁴	4 m				

1. Laser at 25°C and measured at 10 µs.
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 a FC/UPC-type reflectance.

Ordering Information

Description	Part Number
MP 1310/1550 nm OTDR module	E4126MP
MP 1310/1490/1550 nm OTDR module	E4138MP49
MP 1310/1550/1625 nm OTDR module	E4136MP
MP 1310/1550 and filtered 1625 nm OTDR module	E4136RMP
MP Filtered 1650 nm OTDR module	E4118RMP65
MP 1310/1550 and filtered 1650 nm OTDR module	E4138RMP65
Power meter option	E41OTDRPM

Universal Optical Connectors

Straight	EUNIPCFC, EUNIPCSC, EUNIPCST, EUNIPCDIN, EUNIPCLC
8° angled	EUNIAPCFC, EUNIAPCSC, EUNIAPCDIN, EUNIAPCLC

For more information on the T-BERD/MTS-2000, -4000, and -5800 test platforms, please refer to their respective data sheets and brochures or contact your Viavi representative.



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To reach the Viavi office nearest you,
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