



Data Sheet

VIAVI Hi-Res Multimode OTDR Module

For OneAdvisor 800 Fiber Platform

The VIAVI Solutions® Hi-Res multimode OTDR solution characterizes and locates faults on very short multimode fiber runs deployed in aircraft, spacecraft, submarines, and ships. It is the industry's most compact, lightweight, and portable unit, enabling testing in areas where access to fiber is difficult or limited. The solution also characterizes fibers during the manufacturing process.

The streamlined user interface takes the complexity out of OTDR testing. Technicians at any skill level can easily and quickly perform error-free tests. The enhanced OTDR test mode includes the following important features:

SmartLink Mapper (SLM) provides a simple, icon-based map view of a fiber link and its passive elements (connectors, splices, and bends) — it immediately diagnoses potential problems when pass/fail thresholds are set up

The OTDR trace overlay function compares maintenance results to a reference trace — it clearly shows differences for locating potential issues

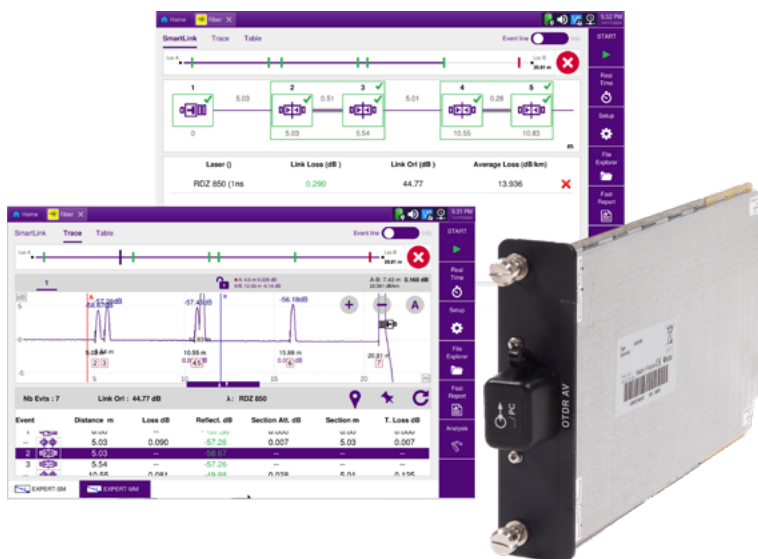
SmartConfigs are generic and user-defined setup configurations — they help eliminate OTDR setup errors and keep results consistent across all users

Key Benefits

- Compact, lightweight, and field portable
- Easy to use for minimal learning/training time
- Precise event characterization

Key Features

- Industry-leading dead-zone performance
- Streamlined and error-free setup
- Connector end-face inspection and automated pass/fail analysis
- FastReport onboard PDF report generation
- TIA/IEC pass/fail thresholds for Tier-2 certification
- 'One data set, 3x results views (SmartLink Mapper, Trace and Table) to match user profile and preference without application switching'



Specifications (typical at 25°C)

General	
Weight (W x H x D)	approx. 500 g (1.1 lb)
Dimensions	213 x 124 x 32 mm (8.38 x 4.88 x 1.26 in)
Environmental	
Operating and storage temperature	Refer to platform's datasheet
OTDR	
Optical interfaces	PC connector with FC and SC adapters (ST and DIN also available)
Laser safety class (21 CFR)	Class 1
Distance units	Kilometer, meter, feet, miles, inches
Group index range	1.300000 to 1.700000 in 0.00001 steps
Number of data points	Up to 256,000 data points
Distance measurement	Automatic or dual cursor
Display range	From 0.05 to 10 km
Cursor resolution	1 cm
Sampling resolution	2 cm
Distance accuracy (relative)	±0.1 m ±sampling resolution ±1.10 ⁻⁵ x distance (excluding group index uncertainties)
Attenuation Measurement	
Automatic, manual, 2-point, 5-point, and LSA	
Display resolution	0.001 dB
Cursor resolution	0.001 dB
Linearity	±0.05 dB/dB
Threshold	0.01 to 1.99 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
RDZ-SLM OTDR Application	
Central wavelength ²	850 +10/-30 nm
Dynamic range ³	16 dB
Pulse widths	1 ns
Event dead zone ⁴	0.2 m
Attenuation dead zone ⁵	0.4 m

Expert OTDR Application	
Central wavelength ²	850 +10/-30 nm; 1300 ±20 nm
Dynamic range ³	24/24 dB
Pulse widths	1 ns to 50 ns
Event dead zone ⁴	0.2/0.25 m
Attenuation dead zone ⁵	1.5/2.1 m

1. At 25°C after 20 minutes for stabilization and after zero setting.
2. Laser at 25°C and measured at 10 μs.
3. The one-way difference between the extrapolated backscattering level at the start of the fiber and the RMS (SNR = 1) noise level, after 30 seconds averaging using the largest pulse width.
4. Measured at ±1.5 dB below the peak of an unsaturated reflective event using the shortest pulse width.
5. Measured at ±0.5 dB from the linear regression using a -35 dB reflectance and the shortest pulse width.

Ordering Information

Description	Part Number
EVO AV high-resolution multimode OTDR module	E8123AV

VIAMI Care Support Plans


Increase your productivity for up to 5 years with optional VIAMI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

Plan availability depends on product and region. Not all plans are available for each product or in every region. To find out which VIAMI Care Support Plan options are available for this product in your region, contact your local representative or visit: viavisolutions.com/viavicareplan

Features

*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration	Accessory Coverage	Express Loaner
 BronzeCare	Technician Efficiency	Premium	✓	✓	✓				
 SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓		
 MaxCare	High Availability	Premium	✓	✓	✓	✓*	✓	✓	✓



Contact Us **+1 844 GO VIAMI**
(+1 844 468 4284)

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

© 2022 VIAMI Solutions Inc.
Product specifications and descriptions in this document are subject to change without notice. Patented as described at viavisolutions.com/patents hrmotdr-ds-fop-nse-ae 30193517 901 0224