

# Certify Optical Fiber Cabling with an OTDR

Enterprise-SLM a Tier 2 Application Tailored for Enterprise and Datacenters



With the increasing amount of fiber being deployed into enterprise and datacenter networks, OTDRs are quickly becoming a critical part of enterprise test practices. Used to locate problems anywhere in the physical network, an OTDR is valuable for both certification and troubleshooting purposes.

Viavi Solutions has been the industry leader in OTDR technology for over 30 years with features and capabilities that give technicians the ability to test correctly and on time. In recent years, our Smart Link Mapper (SLM) OTDR applications have become popular for providing field technicians with OTDR test solutions that are intuitive, informative, and tailored specifically to the user's requirements. The Enterprise-SLM is the latest addition to the family, designed specifically to equip enterprise technicians with the test capabilities they need in an OTDR, including Tier 2 certification (often referred to as "advanced" certification) of single fibers or multi-fiber MPO cables, and an intuitive user interface that enterprise technicians can understand.

# **Intuitive Tier 2 Fiber Testing**

Tier 2 testing with an OTDR is frequently performed in addition to basic, Tier 1 tests. Tier 2 is a complementary test to Tier 1 and fiber inspection, and is recommended for proper documentation of the fiber infrastructure, and proof of work. The OTDR characterizes the different passive elements or events that have been installed and is the only effective test tool that locates breaks, damaged and/or dirty connectors, MPO excessive loss, bends and kinks, and fiber misrouting.

#### Benefits

- Ensure quality workmanship with test automation and optimized workflow
- Meet tight network specifications with a repeatable and precise Tier 2 OTDR, certifying compliance to the industry standards (IEC and TIA)
- Remove complexity of OTDR testing and results interpretation with a tailored and user-friendly interface

#### Features

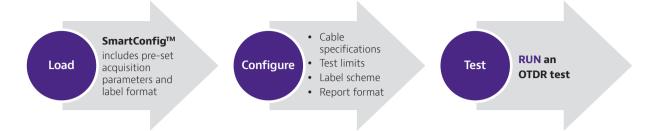
- Self-setting OTDR with pre-defined SmartConfig™
- Icon-based map view of the link and events (SLM)
- Pass/fail alarm criteria per the TIA/ IEC standards
- Project management capability to easily control and document all the tested fiber
- Management of an optical switch to test MPO cable
- Automatic PDF report generation
- Embedded Encircled Flux compliance

#### **Applications**

- Tier 2 certification at installation phase of multimode and singlemode fibers
- Maintenance and troubleshooting of complex structured cabling
- Detection of connector issues in MPO cassettes
- Short multimode fiber links with tight loss budget
- Passive optical local area network (PO-LAN)

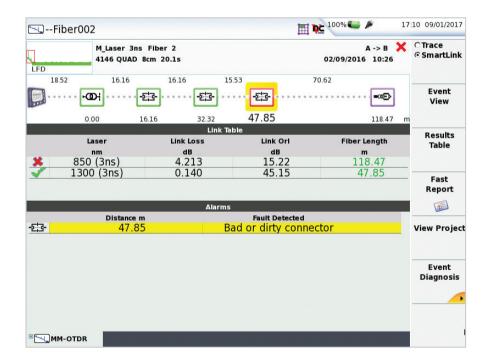
## **Streamlined User Interface**

#### **Easy 3-Step Operation**



#### **Swift Test Results Analysis**

- "Events" on the fiber link are identified, analyzed, and represented as simple icons with immediate pass/fail verdict (based on TIA/IEC standards thresholds)
- Diagnostic of faults, which appear in red on the map view, provide guidance to fix them



## **Controlled Test Flow**

- Load an existing project (.prj) or create your own based on a list of imported labels or cable IDs (.csv)
- Visualize the status for each label, tested/on-going/to be tested, with pass/fail verdict at-a-glance
- Control the optical switch to sequentially test all fibers of a multi-fiber MTP/MPO cable, after one-button press with a testing time reduction by 50%
- PDF report includes each tested fiber and project summary



#### Reliable OTDR Results

• Quickly identify the front and back of MTP/MPO cassettes to avoid unnecessary service disruption with sharp resolution multimode and singlemode OTDR



# Guarantee Results, Repeatability, and Accuracy

- Compliance to the Encircled Flux launch conditions related to the TIA-526-14-B or IEC 61280-04-1ed.2 standards
- Encircled Flux especially applied to multimode high speed networks where the loss budget is tight thus needing more precise attenuation measurements (section attenuation, connector and splice loss)

## **Tier 2 Portfolio**

#### Specifications

	SmartOTDR E126B	T-BERD/MTS-2000/4000 with QUAD/MM OTDR Modules	T-BERD/MTS-6000AV2 with EVO A OTDR Modules
Enterprise-SLM Ready	•	•	•
Dead Zones (EDZ/ADZ)	SM: 0.9/2.5 m	SM: 0.9/4 m MM: 0.8/4 m	SM: 0.6/2 m MM: 0.2/1.5 m
Dynamic Range SM (1310/1550 nm) MM (850/1300 nm)	SM: 40/40 dB	SM: 40/38 dB MM: 26/24 dB	SM: 40/40 dB MM: 24/24 dB
Other applications	FTTA/DAS Access P2P or PON	FTTA/DAS	Metro Access P2P or PON
Encircled Flux (EF) Source (for multimode only)	N/A		•
MPO Cassettes Front/Back Connector Measurement			•

### Ordering information

Tier 2 Packages	Description		
SMARTOTDR126B-P1E	SmartOTDR (5in)1310/1550nm with LS, PM, VFL, WiFi/BT & Enterprise-SLM (includes SC to LC 20m launch lead, carrying case, rechargeable battery)		
TB2-DIS-QUAD-SLM	TB/MTS-2000 (5in) 850/1300 & 1310/1550nm with LS, PM, VFL, WiFi/BT & Enterprise-SLM (includes SC to LC 10m MM launch lead, SC to LC 20m SM launch lead, carrying case, rechargeable battery)		
MTS2-DIS-QUAD-SCPC			
TB4-DIS-QUAD-S	TB/MTS-4000 (7in) 850/1300 & 1310/1550nm with LS, PM, VFL & Enterprise-SLM (includes SC to LC 10m MM launch lead, SC to LC 20m SM launch lead, carrying case, rechargeable battery)		
MTS4-DIS-QUAD-S			
TB6000AV2-OTDR-MM-SM	TB/MTS-6000 (8in) 850/1300 (EF) & 1310/1550nm with LS, PM, VFL, WiFi/BT & Enterprise-SLM (includes SC		
MTS6000AV2-OTDR-MM-SM	to LC 20m EF MM launch lead, SC to LC 20m SM launch lead, carrying case, rechargeable battery)		
MPO Switch Packages	Description		
MPOKIT-SWITCHMM	3m jumper FC/PC to SC/PC, 3m jumper SC/PC to SC/PC, (2x) MTP/MPO bulkhead adapter with opposed key, (2x) 20m MM-OM4 launch and receive MPO cables (pinned-unpinned), MM-OM4 1x12 MPO switch (pinned)		
MPOKIT-SWITCHSM	3m jumper SC/PC to SC/APC, (2x) MTP/MPO bulkhead adapter with opposed key, (2x) 20m SM launch and receive MPO cables (pinned-unpinned) , SM 1x12 MPO switch (pinned)		
Enterprise-SLM Software License Keys	Description		
ENTERPRISE-100	ENTERPRISE-SLM: OTDR software application for new purchase of SmartOTDR, T-BERD/MTS-2000, T-BERD/MTS-4000 and T-BERD/MTS-6000 AV2 mainframes (already included in above Tier 2 packages)		
ENTERPRISE-2K			
ENTERPRISE-4K			
ENTERPRISE-6KV2			
ENTERPRISE100UP	ENTERPRISE-SLM: OTDR software application for upgrade of existing SmartOTDR, T-BERD/MTS-2000, T-BERD/MTS-4000 and T-BERD/MTS-6000 AV2 mainframes		
ENTERPRISE2KUPG			
ENTERPRISE4KUPG			
ENTRPRISE6KV2UP			



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