Product Brief

Empower FTTH/PON technicians to become OTDR fiber test experts

FTTH-Smart Link Mapper (FTTH-SLM) application for SmartOTDR and T-BERD/MTS OTDR Platforms

Deploy a reliable network for quality services

Current and future demand is on the rise for bandwidth-intensive services such as HD video streaming, shared content in the cloud, and video calls. To answer this need, service providers, municipalities, and even private enterprises are deploying more fiber optic infrastructure to the consumer's house or the user's desk. OTDR testing of that fiber is vital to provide confidence that the physical network will deliver fast and reliable services with minimal first-time install failures.

OTDR Testing Made Simple

Installers and contractors who are traditionally skilled in copper or coax network installation must now qualify or troubleshoot fiber installations using an OTDR. This can be challenging, as an OTDR is often considered complex to configure and measurement results difficult to interpret. The FTTH-SLM is a field-installable software application that removes the complexity from OTDR testing and supports technicians of any skill level.

Benefits

- Provides confidence in fiber network performance
  - Proves construction quality for acceptance
  - Troubleshoots and locates breaks and issues
- Empowers field technicians to become instant OTDR experts
  - Automatically discovers and configures for any network topology
  - Schematic map view of the results identifies all passive network elements
  - Immediate indication and diagnosis of problems
- Enhances field productivity
  - Completes test process twice as fast and more reliably than any standard OTDR
 - Certifies work to international standards with on-board pdf reports generation

Applications

- Installation, commissioning and maintenance of any FTTH network
- Traditional PON, XGS-PON, NG-PON2, Passive Optical LAN (POL)

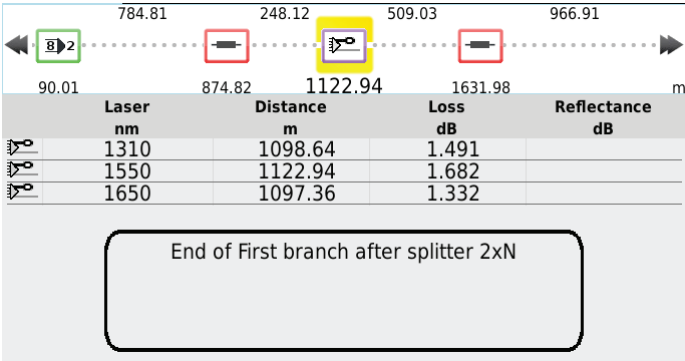# More than a traditional OTDR
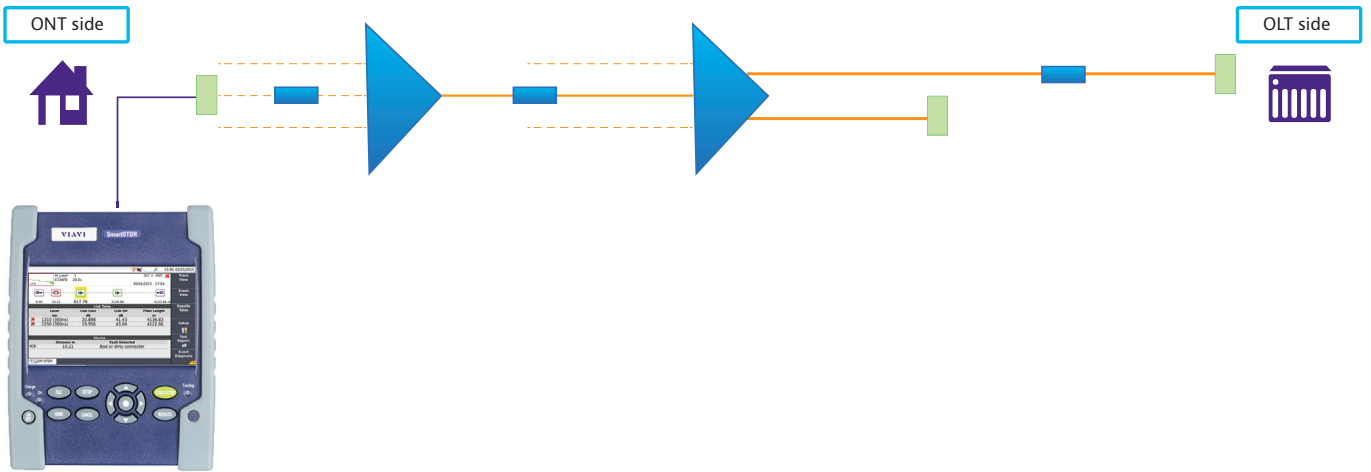
To be able to measure each segment of a PON network, testing from the ONT (customer) back to the OLT (central office), a traditional OTDR would require multiple manual tests (acquisitions) using different parameters for each. FTTH-SLM dynamically adjusts the testing parameters and automatically performs multiple acquisitions to achieve the optimum test results. All the information gathered is displayed as a single icon map view (Smart Link Mapper or SLM) and a combined OTDR trace.
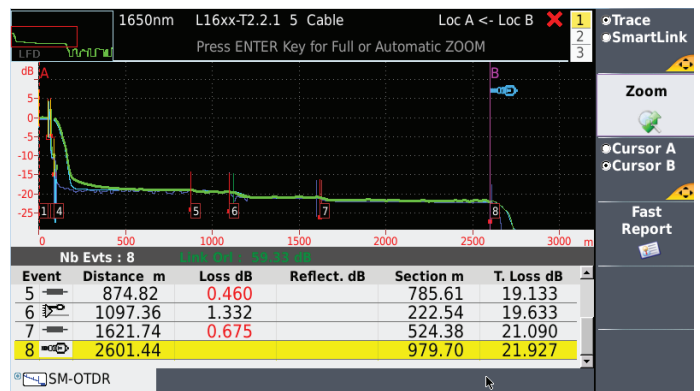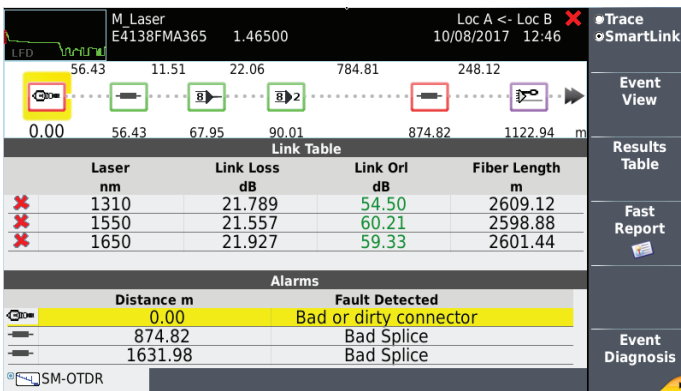
Tailored for FTTH applications

	DISCOVER mode is a fully automatic mode designed for simplification and ease of use. It automatically sets the optimum acquisition parameters to detect and identify all the network elements (splices, connectors) and splitter types (e.g. 1x8, 1x32, cascaded, 1x128, etc.).
	IEEE/ITU-T PON standards thresholds are pre-loaded to avoid time consuming manual entry of pass/fail criteria. Pass/fail events are immediately highlighted and reports generated to international standards.
	The link description can be set with the OLT Id, ONT Id, Feeder Id, and Distribution Id information. The stored results are then linked to the customer and network equipment's information.
	Predefined set-up configurations (SmartConfigsTM) are available for fast set up of common PON scenarios. These can be easily modified with user's specific settings, and saved and shared for daily use by multiple technicians.
	FTTH-SLM is the only solution on the market capable of detecting 2xN splitter and identifying the two input branches, thus providing the correct pass/fail verdict.
	The real-time acquisition - accessible by holding the START/STOP button for 2s -commonly used during construction to check the loss of an optical element being spliced, optimized to characterize the splitters.

Pick Your Ideal Solution

	SmartOTDRTM Lightweight, handheld OTDRs		T-BERD/MTS-2000/4000/5800 Compact modular platforms			T-BERD/MTS- 6000AV2 Advanced modular network test platform
	100A	100B	4100 MA	4100 MP/MA3	4100 MP2	EVO 8100 C
Typical splitter ratio	1x32	1x64	1x32	1x64	1x128	1x64
Max splitter ratio	1x32	1x64	1x32	1x128	1x256	1x64
Splitter Attenuation Dead Zone (m) @ 16 dB	50	45	55	40	35	25
Min. recommended launch cable length (m)	20					
Connector type	VIAVI recommends the use of APC connectors for FTTH testing.					
License (when ordered with an OTDR)	ESMARTFTTH-100		ESMARTFTTH-2k ESMARTFTTH-4k ESMARTFTTH-5K			ESMARTFTTH-6K
License (upgrade of existing units in the field)	ESMARTFTTH100UP		ESMARTFTTH2KUPG ESMARTFTTH4KUPG ESMARTFTTH5KUPG			ESMARTFTTH6KUPG