

Brochure

VIAVI

SmartOTDR Test Kits

The affordable, easy-to-use handheld tester for techs at any level

The lightweight and compact SmartOTDR™ performs all essential fiber tests for metro and access networks with unprecedented OTDR capabilities that cover all network testing configurations and requirements for technicians at any skill level.

These capabilities are the key to optimizing field technicians' efficiency, speeding up the overall test process while delivering accurate and repeatable measurements with confidence.

An intuitive user interface drives efficiency, improving quality of work and reducing the need for training and support. Advanced and intelligent functions detect and perform precision measurements on passive optical elements to provide superior link characterization that guarantees a solid network foundation. VIAVI TPA (test process automation) automates the tedious and complex tasks, from entering job information to reporting and results management.



Benefits

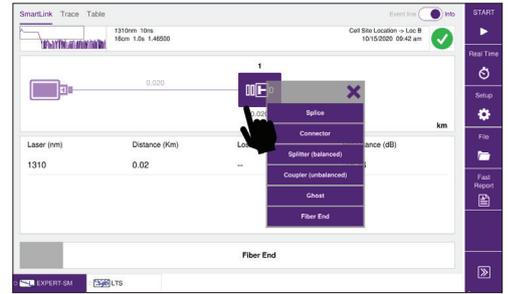
- Easy to use for minimal learning/ training time
- Combines all essential fiber tests in one handheld with visual fault locator (VFL), optical power meter (OPM), and microscope options
- Assisted test/workflow to simplify complex testing tasks
- One data set, 3x results views (SmartLink Mapper, Trace and Table) to match user preference, without switching applications
- Fast, error-free testing, avoiding customer services disruption
- Assign jobs and submit reports faster with VIAVI TPA to simplify administrative work

Features

- Single-/dual-/tri-wavelength versions with 1310, 1550, and in-service 1625 or 1650 nm wavelengths
- Custom/manual OTDR pulse length
- Light, compact, hands-free design includes 5" high-visibility outdoor touchscreen
- Integrated CW light source
- Built-in broadband and dual-band selective power meter (1490/1550/1577 nm)
- PON optimized to test through a 1x128 splitter with FTTH-SLM
- Automated fiber inspection and macrobend detection with pass/fail analysis software
- 4G/5G connectivity via USB, Bluetooth/WiFi
- All-day battery life

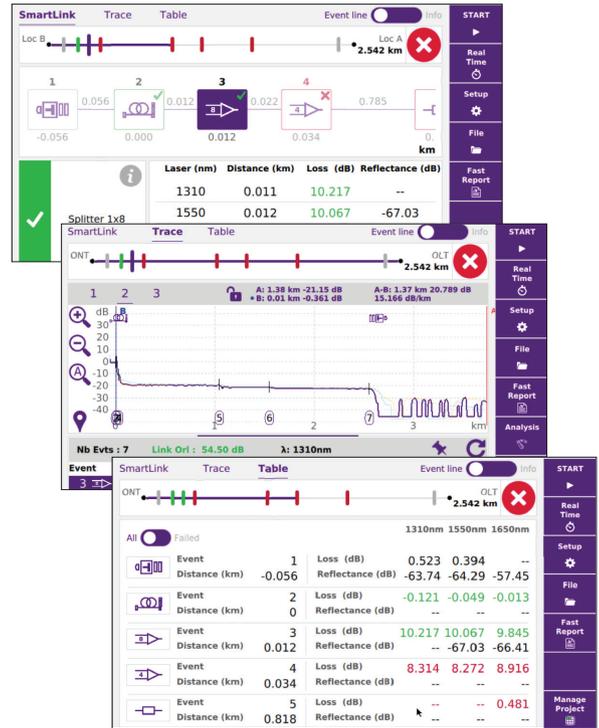
Ease of Use for Minimal Learning Time and Greater Control

SmartOTDR is the first OTDR with intuitive smart device control and ergonomic user interface. Fast and responsive, it puts control at your fingertips. The multi-touch, swipe, pinch zoom, scroll and long press gestures allow for greater instrument control and results manipulation.



See Information the Way You Want To

It's your preference on how to review results, whatever works best for you. With SmartLink, Trace, and Table views all in one place, there's no need to switch test apps. And you can switch instantly between views, no retest required. Data correlated across the views providing seamless analysis to make your life easier.



Take the Headache out of Trace Analysis

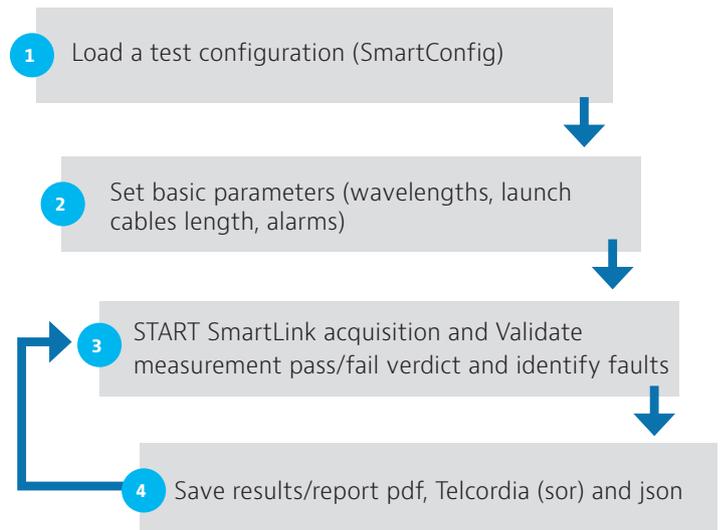
Let SmartLink Mapper (SLM) perform the analysis and provide diagnosis for you, with guidance on how to fix faulty elements. It quickly identifies and labels all elements represented in a simple link map with enhanced event description plus clear pass/fail information. Easily toggle between SmartLink, Trace and Table views with direct correlation of a selected event. Basic SLM is included as standard.

Dedicated SLM Software Applications

- [High fiber-count/bulk fiber testing: Cable-SLM](#)
- [Mobility/5G: FTTA-SLM](#)
- [FTTH/PON: FTTH-SLM](#)
- Data Center/Enterprise: Enterprise-SLM

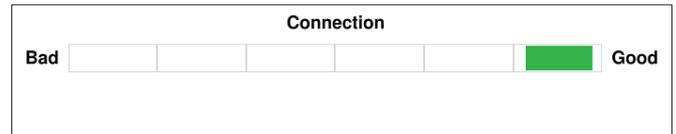
No Setup Needed with Guided and Repeatable Tests

Smart Test Assistant eliminates all complex OTDR configuration parameters and guides the field technician through initial setup, testing, result review, and reporting.



Test with Confidence

With every test, an OTDR test port health check ensures good launch conditions to achieve high measurement accuracy. Permanent live traffic detection avoids any potential damage to transmission equipment and poor measurement results.



One Tool for the Network Lifecycle

A single-port approach combining 3 wavelengths, including a 1625 or 1650 nm filtered wavelength, delivers a single tool for construction, maintenance, and live network troubleshooting. No need to move test ports in the presence of live traffic; simply switch to in-service/filtered wavelengths for seamless change between construction and troubleshooting tasks. It also certifies a fiber is ready for future C- or L-band (xWDM) operation.

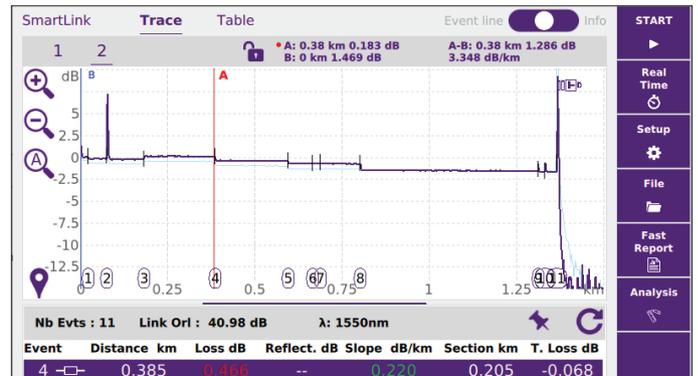
Let the OTDR Manage Your Test Data and Reporting

A customizable file naming structure allows detailed link descriptions and designations to be included in result filenames for more organized file storage, while autosave takes care of incrementing fiber numbers and saving of result files to avoid file naming errors. On-board report generation eliminates manual post-processing work required to prepare results for submission. Change results for all wavelengths tested into a single report cuts the volume of test reports in half and reduces the file management burden.



Greater Depth of Analysis, More Control

Expert OTDR is designed for construction crews who require in-depth analysis and greater control over test settings for various types of fiber links and network scenarios.



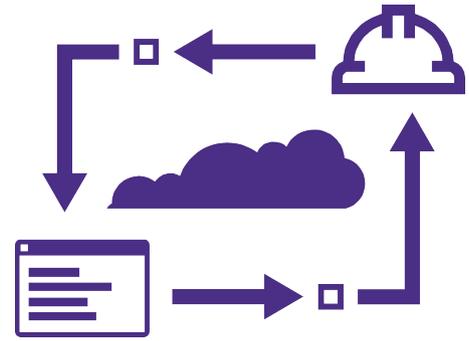
SmartOTDR Features

	<p>Smart Acquisition (SmartAcq) is a fully automated multi-pulse acquisition process which optimizes and maximizes the detection of all the optical network elements such as splices, connectors, MUX/DEMUX (both near and far end) for a point-to-point topology. For ease of viewing the multiple traces obtained from the different pulse width acquisitions are combined to form a single graph and table of events per wavelength. Standard with VIAVI OTDR.</p>
	<p>On-board ISO/IEC and TIA thresholds certify that fiber build/install is in accordance with industry standards. Custom pass/fail thresholds can be manually configured and saved as SmartConfig™ (.cfg) files which can be shared and reloaded at any time. Pass/fail events are immediately highlighted on test results and reports generated are based on the defined alarms criteria.</p>
	<p>Real-time acquisition is commonly used during construction to check the loss of an optical element being spliced or a fiber being bent and can be used to measure section loss between two cursors or even measuring the reflectance ORL of a connector.</p>
	<p>Automatic and custom setups, so technicians can opt to setup an OTDR manually (by specifying pulse-widths, range, resolution, averaging time, etc.) or choose to be helped by the automatic settings in SmartAcq. Once the configuration is set, it can be saved and shared to multiple instruments to guarantee consistency in test parameters for all technicians ensuring measurement consistency and repeatability.</p>
	<p>Adapt to any test requirement, with the ability to manually define OTDR pulse length required. Greater flexibility for any test scenario</p>
	<p>Advanced analysis and precise measurements can be made with the use of the A and B cursors, allowing a technician to manually calculate the loss (using the 2-point or 5-point method), reflectance, ORL and attenuation in dB/km for a specific section of fiber.</p>
	<p>Event location memory can be locked, allowing event locations to remain fixed for all subsequent test, and ensuring high measurement consistency and repeatability across all fibers. When deploying high fiber count cables the optical elements (or events) detected on one fiber strand will likely be at the same location on the other strands, memorizing event locations allows a user to 'pin' the position of automatically detected or added manually events.</p>
<p>[TRACE]_{REF}</p>	<p>Trace comparison (reference overlay) offers the ability to compare reference traces to current-day measurements. This is key to assessing degradation of the fiber infrastructure over time to determine if maintenance is required, or to confirm fault diagnosis.</p>



Managing Your Workforce, Task, and Test Data

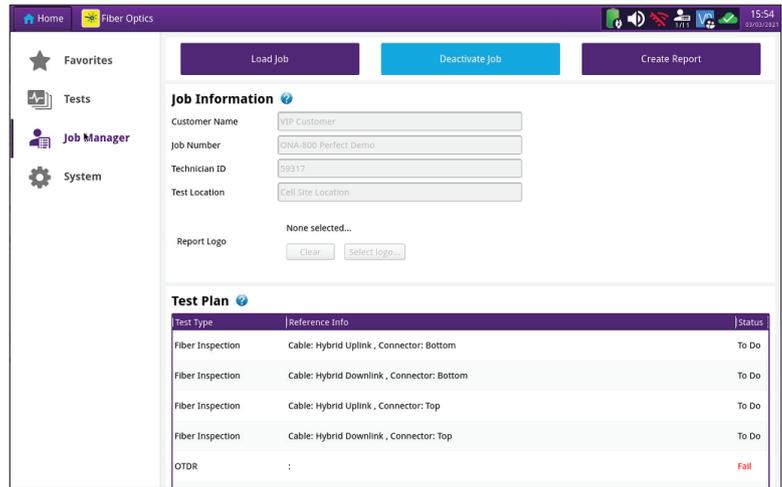
VIAMI TPA (test process automation) allows your team to deliver expert-level test results and close projects on the first try, every time. TPA is a closed-loop test system that optimizes workflows, eliminates manual, error-prone work, and automates immediate data reporting for job close-out, team progress updates and network health analytics. Execute jobs efficiently to ensure high quality network builds, rapid turn-up/activation, and enhanced operational visibility.



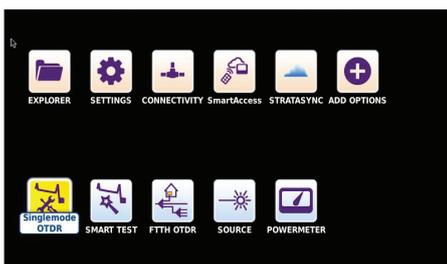
Managing Fiber Work

Plan and assign jobs with guided procedures and automated job reports:

- Allows jobs with a detailed test plan to be created, assigned, and sent to a tech's instrument via the VIAMI Mobile Tech App
- Associates tests to specific job workorder
- Sequence of individual test tasks grouped together in a single job
- Instrument UI displays step-by-step task instructions, progress, and results
- Enrich test results with workflow audit details – geolocation data, time stamp, and multimedia attachments (pictures, signature capture) through Mobile Tech App



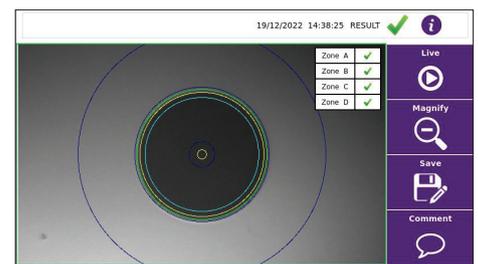
Everything a Fiber Tech Needs in a Single Solution



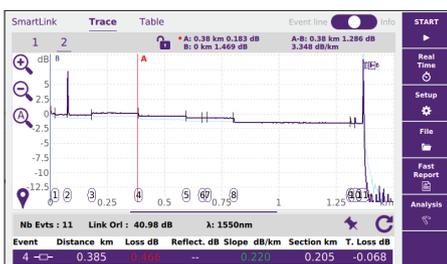
Combines all essential fiber tests test capabilities in one handheld solution



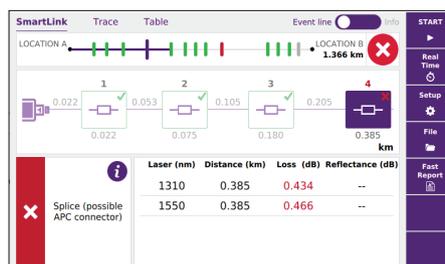
Built-in power meter and laser source



Integrated fiber end-faces inspection with pass/fail analysis



OTDR trace view for expert analysis and additional manual measurements



Smart Link Mapper view, simplified icon based view of OTDR test results



SmartAccess Anywhere, remote access and control of instrument for coaching and support of techs in the field, includes file transfer

SmartOTDR Packages

Application	Dynamic Range	Wavelengths	Description	Part Number
Installation	30 dB	1550 nm	SmartOTDR 100AS BASE Kit – APC	STOTDR-BASE-I-APC
Installation	30 dB	1310/1550 nm	SmartOTDR 100AS PLUS Kit – APC	STOTDR-PLUS-I-APC*
Installation	30 dB	1310/1550 nm	SmartOTDR 100AS PLUS Kit – PC	STOTDR-PLUS-I-PC*
Installation	35 dB+	1310/1550 nm	SmartOTDR 126A PRO Kit – APC	STOTDR-PRO-I-APC*
Installation	35 dB+	1310/1550 nm	SmartOTDR 126A PRO Kit – PC	STOTDR-PRO-I-PC*
Installation/Maintenance	35 dB+	1310/1550/F1650 nm	SmartOTDR 138FA65 PRO Kit – APC	STOTDR-PRO-IM-APC*
Installation	40 dB+	1310/1550 nm	SmartOTDR 128B PREMIUM Kit – APC	STOTDR-PREMIUM-I-APC*
Installation	40 dB+	1310/1550 nm	SmartOTDR 128B PREMIUM Kit – PC	STOTDR-PREMIUM-I-PC
Installation/Maintenance	40 dB+	1310/1550/F1650 nm	SmartOTDR 138FB65 PREMIUM Kit – APC	STOTDR-PREMIUM-IM-APC*
Installation/Maintenance	40 dB+	1310/1550/F1625 nm	SmartOTDR 136FB PREMIUM Kit – APC	STOTDR-PREMIUM-IM2-APC*

*For ordering in the USA, add a F to the part number, e.g. STOTDR-PLUS-I-APC becomes FSTOTDR-PLUS-I-APC

What's Included

	Built-in WiFi and Bluetooth (BLE)	Light Source	Smart TEST OTDR App.	Power Meter	Expert OTDR App.	VFL	Large carrying case	FTTH-SLM Base OTDR App.
BASE	■	■	■				■	
PLUS	■	■	■	■			■	
PRO	■	■	■	■	■	■	■	
PREMIUM	■	■	■	■	■	■	■	■



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