

Brochure

VIAVI

FiberComplete PRO

Acceptance testing process control application for fibercertification to improve technician efficiency, driving operational excellence.

FiberComplete PRO™ is the industry's fastest, most compact and versatile solution for bi-directional fiber certification.

The first solution with enhanced automation to significantly reduce time and effort required for almost every aspect of the test and certification process including test setup and data exchange, results analysis and report generation.

A range of applications deliver all the necessary fiber testing requirements from basic insertion loss (IL) and optical return loss (ORL) to advanced bi-directional OTDR analysis (TrueBIDIR) to certify fiber links are built to the required specification ensuring network reliability.

Achieve improved operational efficiency with a single test port solution with integrated datalink and a single button press approach that removes manual steps and processes to deliver network builds/expansions on time.

Perform immediate corrective actions while still on-site and prevent future repeat visits with real time bi-directional analysis.

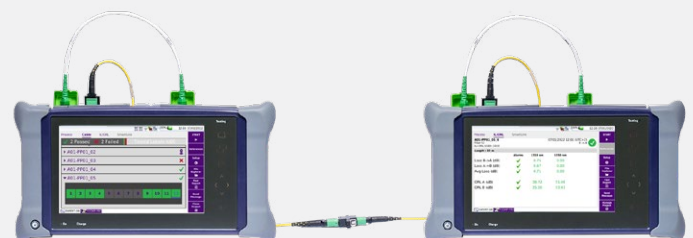
Ramp up new fiber techs faster and limit human errors by removing complexity and simplifying processes.

Features

- Finish jobs sooner, fastest full bi-directional fiber cert solution, up to 80% time saved
- Limit call backs and repeats, perform corrections as you test
- Eliminate off-site or post processing work and review time
- Remove test complexity, manual processes, and risk of human errors
- Workflow efficiency and consistency for technicians and contractors
- Direct submission of reports to the cloud (StrataSync TPA suite)

Applications

- Network Build and Maintenance for
 - Enterprise/Structured Cabling
 - Data Center Interconnect (DCI)/ Submarine Networks
 - Access FTTx
 - FTTH, Passive Optical Networks (PON)
 - CATV HFC
 - Wireless backhaul/CRAN/5G x-haul
 - Metro and Core/Long haul Networks

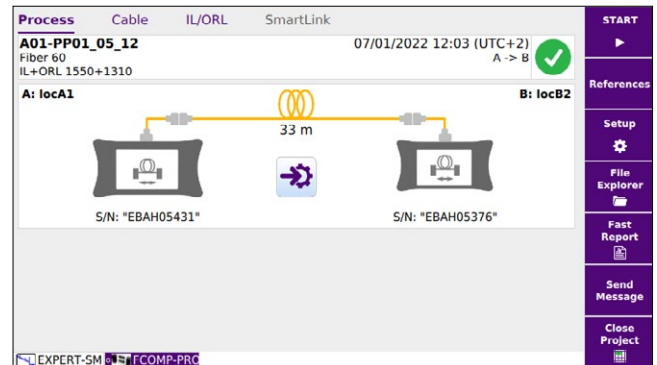


Carry Fewer Tools

FiberComplete integrates up to six instruments into one test module. It combines T-BERD/MTS platform features, such as visual fault location (VFL), talk set, broadband power meter, and a digital analysis microscope, with the modules IL, ORL and OTDR capability giving technicians the most integrated, versatile solution so they can perform testing of any fiber network.

Simplified Setup

The moment instruments are connected to the Fiber Under Test (FUT) an instant continuity check automatically pairs the units and performs a length measurement (patent pending) which then guides and informs the intelligent test configuration. Automatic data exchange ensures no mistakes are made when matching near vs far end test setups as mismatched test parameters can produce poorly correlated OTDR test results and cause site revisits for retests.



Intelligent Test Configuration

Intelligent setup enables you to ramp up new techs faster and make them effective in the field in significantly less time. By utilizing the information gained from the instrument synchronization and initial loss measurement FiberComplete PRO can select the best settings for pulse width, acquisition time etc. to guarantee optimum OTDR test configuration and measurement accuracy.

Instant Test and Guided Loss Referencing

Perform out of the box loss testing with built-in factory references for IL and ORL or utilize the on-board referencing 'wizard' to guides techs through the IL, ORL referencing process (both loopback and side by side) to ensure best measurement accuracy for test results.

Test with confidence

With every OTDR test a 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.



Real Time Bi-Directional OTDR analysis – TrueBIDIR (patented)

TrueBIDIR improves measurement accuracy, event detection, location accuracy, lets you deal with gainers and allows immediate corrective actions to be performed while you are still on-site, reducing future site revisits. After each test sequence, utilizing the FUT datalink, FiberComplete PRO performs real-time bi-directional analysis of the OTDR results taken in both directions, averaging the loss measurements for every detected event to provide the 'True' event loss.

Innovative test sequencing for optimum workflow

A single test port approach allows sequencing multiple measurements for IL, ORL, OTDR and bi-directional OTDR to deliver the optimum workflow and higher levels of efficiency while enabling parallel tasks to be performed. The integrated high-speed data exchange via the FUT (patent pending) means no other data or communications links are required to synchronize instrument configurations or to retrieve test results from a far end unit for the real time bi-directional OTDR analysis. While a test sequence is in progress a tech can prepare the next fiber, batch of fibers or MPO to be tested, establishing a far more efficient and productive workflow that can slash test, certification, and reporting times by over 80%.

Scale for high fiber count cables

With the use of fan out cables or native MPO connectors test sequences can be prepared to certify multiple fibers in a single action. The fiber cable management places results in a single 'Cable' view that gives a real time overview of project progress and the pass/fail status of each fiber tested.

Let FiberComplete PRO 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. Results for all wavelengths and tests (IL, ORL and OTDR) are consolidated into a single complete report cutting the volume of test reports in half and reducing the file management burden.

Minimal post processing

Save even more time and effort, the on-board analysis and report generation capabilities means no need to use 3rd party software to perform bi-directional OTDR result analysis and reporting. Test results and reports can be uploaded directly from the instrument to the cloud (StrataSync) for near real time dashboarding and project progress reporting.

| Report name: toto.pdf | | Start fiber: 1 | | | |
|---|-----------|---------------------------------------|------------------------------|---------|--------|
| Report date & time : 03/12/2015 08:38 | | Number of fibers: 144 | | | |
| Job Id: JOB123 | | Label list: N/A | | | |
| Technician Id: Tcha.Tcha | | Fiber count: N/A | | | |
| Project name: Bingo2 | | | | | |
| Mainframe's model A: T-BERD 4000 V2 (S/N 118) | | Module's model: E4126B-FCOMP (S/N 20) | Calibration date: 12/01/2020 | | |
| Mainframe's model B: T-BERD 4000 V2 (S/N 220) | | Module's model: E4126B-FCOMP (S/N 35) | Calibration date: 12/01/2020 | | |
| SUMMARY RESULTS | | | | | |
| Fiber # | | 1310 nm | 1550 nm | 1625 nm | |
| 1 | ✓ | Loss/ORL Results | | | |
| | ✓ | Avg Loss (dB) | 1.05 | 1.78 | 1.85 |
| | ✓ | ORL A (dB) | 33.73 | >55 | 45.21 |
| | ✓ | ORL B (dB) | 33.49 | >55 | 44.51 |
| | ✗ | Bi-Directional OTDR | | | |
| | Event # | 1 | Avg. Loss (dB) | 0.989 | 0.963 |
| | Dist. (m) | -26.17 | Max Refl. (dB) | -82.90 | -60.82 |
| | Event # | 2 | Avg. Loss (dB) | 0.306 | 0.534 |
| | Dist. (m) | 0.00 | Max Refl. (dB) | -- | -67.16 |
| | Event # | 3 | Avg. Loss (dB) | 0.340 | 1.321 |
| Dist. (m) | 31.59 | Max Refl. (dB) | -- | -75.49 | |
| Event # | 4 | Avg. Loss (dB) | 0.660 | 0.753 | |
| Dist. (m) | 56.00 | Max Refl. (dB) | -64.62 | -55.05 | |
| 2 | ✓ | Loss/ORL Results | | | |
| | ✓ | Avg Loss (dB) | 1.05 | 1.78 | 1.85 |
| | ✓ | ORL A (dB) | 33.73 | >55 | 45.21 |
| | ✓ | ORL B (dB) | 33.49 | >55 | 44.51 |
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FiberComplete PRO Applications

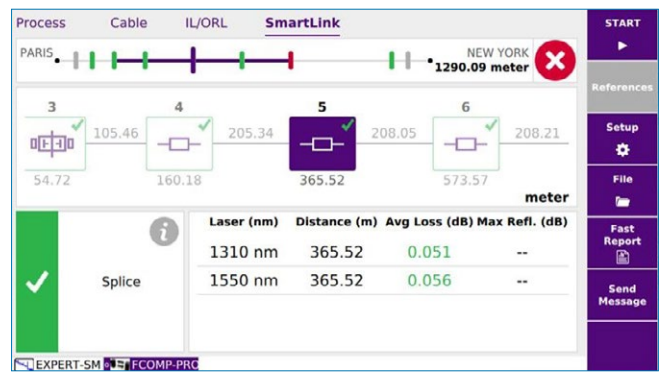
Loss Test – Automated bi-directional IL, ORL with fault finding

The Loss Test application delivers the basic set of fiber link certification and fault-finding measurements. It combines 5 features into a single application. A light source and power meter that combine to form an optic loss test set enabling bi-directional insertion loss testing, an ORL meter and a fault finder. A single button press executes a fully automated bi-directional test process (4.5 seconds) that stores test results with a predefined naming structure and generates consolidated reports.



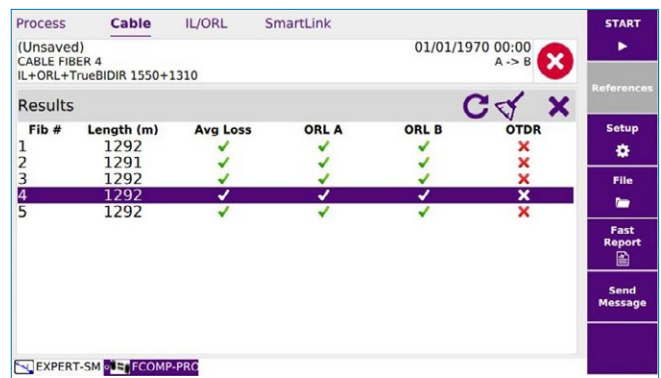
TrueBIDIR and Loopback – On-board Real Time bi-directional OTDR Analysis

The TrueBIDIR application offers real time bi-directional OTDR results analysis. Bi-directional OTDR analysis marries up loss information about every event on a fiber link and averages the measurements to provide a more accurate or 'True' loss measurement. Removing the need for any post processing analysis work and enabling corrective actions to fix or repair failing fibers to be carried out while you are still on site.



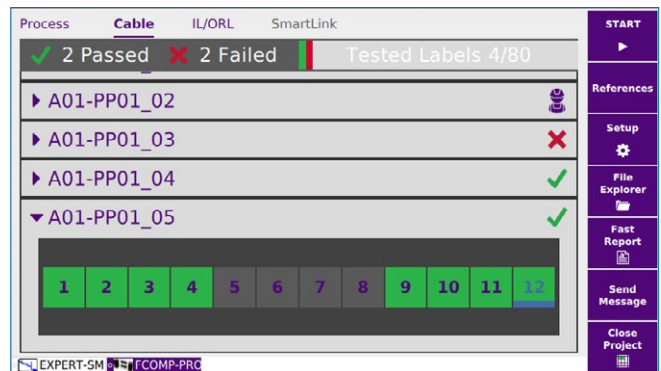
FiberComplete™ – Bi-directional IL, ORL and OTDR

FiberComplete is the first and only solution to fully automate all the fundamental fiber tests, such as bi-directional IL and ORL plus OTDR testing via a single test port and one button push application (patented). Providing a complete fiber certification and characterization covering the end-to-end link and all individual link elements in around 1 minute.



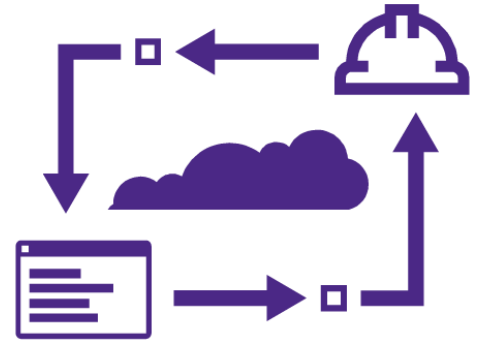
High Fiber Count – Automated bi-directional test sequencing with fiber cable management

High fiber count support allows you to scale all of the bi-directional test capabilities and automate the certification of high-density fiber cables. By utilizing an MPO switch or fanout cable twelve fibers can be tested in a single sequence, including an automatic fiber continuity test and mapping to establish MPO polarity and type (A, B or C). Results are displayed in a single Cable and Label view that gives a real time overview of project progress and the pass/fail status of each fiber group/bundle tested.



Managing your workforce, tasks and test data

Test Process Automation (TPA) 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 VIAVI Mobile Tech App
- Associate's 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

