FiberDoc - OTDR analysis and industry-wide accepted documentation of fiber optic routes

FiberDoc Produkte - Vorsprung durch Qualität

with education and training offer - Contact us!

Benefits

Checking for problem sources 3xM: material, assembly and measurement

Device-independent platform for quality control and documentation

Compatible with many measuring devices

Industry-wide recognized documentation format (measurement reports)

Support for loop measurement

Export of results and Excel macro for extended reporting

Large user community

Cloud support for centralized measurement data acquisition and control

Cloud printing function for user-defined reports

Add-on for the creation of measurement reports in accordance with ZTV-43 (DT)

Extensive range of first-hand training courses

Features of version 5.5

Support of further device parameters (measuring time, serial number)

New file format for cable project Simplification in the fiber list editor for .trc/.msor (multiple WL)

Undo/Redo function

Integrated PDF print function

Improvements in the visualization (curves of all WL, event types, colored cursors, auto-zoom, menu arrangements, etc.)

Additional cursor (start of VL/EA) in loop mode

Event analysis with macro bending

Extensions in cable printing

Newly developed Excel macro

Simple device management

Extended event specification

Professional extension

Calculation and display of the IEC dynamic range and E-event for noise (IEC 61746 standard)

Attenuation uniformity analysis (IEC TS 62033 standard)

Calculation and display of noise in dB (separately for measuring fibers and measuring section)

Calculation of the actual event dead zones and check whether auxiliary cursors (5-point method) are located within the dead zones

Automatic testing of device parameters and OTDR measurement quality parameters (specification of limit values)

- Pulse duration
- Measuring/distance range
- IEC dynamic range
- Noise reduction
- Dead zones and event cursors

Automatic check for duplicates

- within a cable project or within a selected file folder
- Comparison of the actual measurement curves (independent of the date and time of the r measurement)

Ideal for large projects: Professional extension

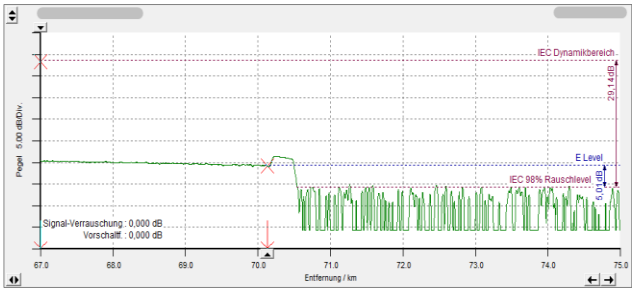
Despite technical experience and expertise, the time factor in quality control remains a significant cost parameter. The additional testing and analysis functions are the ideal complement to the basic version in order to reduce this and at the same time ensure a high level of quality testing. No matter how many fibers there are in the measured cable, the functions of the Pro extension allow the quality to be assessed more quickly and in greater depth. Possible defects and faults can be detected more easily and eliminated more quickly with suitable measures.

The following table shows the most important Pro functions and their advantages in the assessment and quality inspection of material, assembly performance and measurement performance:

	Duplicate	Device parameters	IEC dynamic range	IEC Conformityanalysis	Signal-Noise reduction	Actual dead zones
Material			✓	✓	✓	✓
Assembly			✓	✓	✓	✓
Fairs	✓	✓	✓	✓	✓	✓

IEC dynamic range (according to IEC 61746)

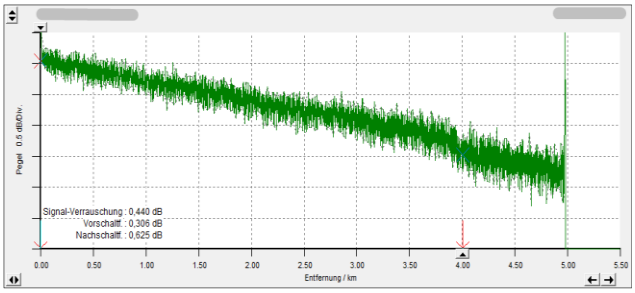
FiberDoc calculates the IEC dynamic range and the distance between the fiber or cable end (E-event) and noise. In the cable project, you can quickly and reliably identify fiber measurements that have not been measured optimally: device settings that do not match the link, a low-power measuring device, an inadequatemeasurement setup and equipment. Furthermore, a dB-to-noise ratio that is too low can be an indicator of errors and defects in the installation and the material used.



Example: insufficient dynamic range of the measurement (only 5.01 dB reserve)

Signal noise

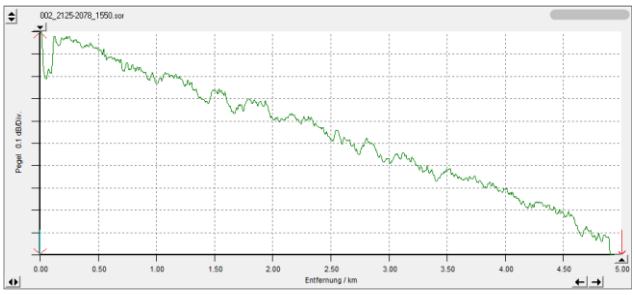
Excessive noise in the measurement curve makes it difficult to check and evaluate, e.g. to find important events and precisely determine the optical lengths. Particularly in the case of measurements in FTTx and access networks, this leads to high inaccuracies and makes reliable quality testing almost impossible. A high noise level can have various causes. The main reasons are often poorly installed cable systems and incorrectly performed measurements.



Example: unacceptably high signal noise on the "measurement curve"

IEC uniformity analysis (according to IEC TS 62033)

The quality of supplied cables and laid cable routes plays a key role in the sustainability of new networks and broadband expansion. With this analysis, possible deficits and quality defects in the fiber and cable material can be made visible: e.g. inhomogeneities in the fiber material properties and cable structures (sheath, coating) and undesirable temperature dependencies. But improper storage and transport, as well as installation errors, can also come to light in the form of non-uniformities in the kilometer fiber attenuation.



Example: Backscatter measurement with "snake line" and discontinuities > 0.1 dB