FiberXpert
OTDR 5000

Designed with the installers and operators of enterprise networks in mind, the FiberXpert OTDR 5000 measures, documents and troubleshoots fiber optic networks. The FiberXpert OTDR 5000 provides very high resolution with one of the shortest dead zones available for testing multimode and single-mode fibers, thus enabling measurement of very short fiber links. Automatic analysis features simplify the measurement tasks

FIBER OPTIC CABLING CERTIFIER

IT Networks

FiberXpert
OTDR 5000

Characteristics

- Optical Time Domain Reflectometer (OTDR) for 850/1300nm multimode or combined
  for 850/1300nm multimode and 1310/1550nm single-mode
- Standards compliant Tier 2 measurement of fiber optic cabling
- Automatic Pass/Fail analysis of the test results according to the limits specified by TIA/IEC
- Display of the OTDR trace in a graphical format for a length-dependent
  analysis of all events for reflection and attenuation
- All fiber link events and analysis listed in a table of results
- Automatic macro-bend detection
- Built-in optical loss test set
- Optional fiber inspection probe
- Large color LCD touch screen
- Generation of professional reports with the central eXport evaluation software

Easy handling and analysis

A special carrying case with shoulder strap allows for a hands-free operation and eliminates the need to mount the measurement tool testing. The results are displayed on the 5 inch touch screen and can be analyzed and saved conveniently. Featuring an automatic event detection, all events on a fiber optic link are automatically displayed with a Pass/Fail evaluation.

Expanded measurement capabilities

Additional measurement functions such as attenuation measurement and an optical power meter provide for an accurate measurement of the total link loss and of the output power of active equipment such as switches. The optional fiber inspection microscope enables you to document the quality of the connector end-face after installation. This is a helpful feature, especially in instances of faults or warranty claims.

Consolidate the measurement results of your projects in one place

Cabling projects usually have both fiber optic and copper cabling links. eXport software manages the test results of both FiberXpert and WireXpert, consolidating all results of your project in one software package.

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Contents of the kit

**FiberXpert OTDR 5000 Quad
Multimode/Single Mode
850/1300/1310/1550nm Optical Time Domain Reflectometer**
Includes main measurement unit, SC compatible Multimode module,
SC compatible Single Mode module,
Li-Polymer batteries, power supplies, soft case with shoulder strap,
hard carry case, calibration certificate

FiberXpert OTDR 5000 Multimode
850/1300nm Optical Time Domain Reflectometer
Includes main measurement unit, SC compatible Multimode module
Li-Po batteries, power supplies, soft case with shoulder strap,
hard carry case, calibration certificate

FIBER MICROSCOPE

Before testing any fiber run and before plugging connectors together, you should check to ensure they are clean. Dirt will degrade data transfer or can permanently damage the contact area. With the new fiber microscope from Softing IT Networks you can quickly and easily check connector ends and automatically evaluate to IEC 61300-3-35.

The USB interface allows connection to WireXpert or FiberXpert.

In summary:

• One-click test and evaluation of fiber surfaces

• Automatic evaluation conforming to IEC 61300-3-35

• Compatible with WireXpert and FiberXpert

• Adapters for common fibre connectors

FIBERXPERT LAUNCH CORD

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• Adapters for common fiber connectors

FiberXpert
OTDR 5000

optimize!
softing

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For technical information and support please contact the Softing office in your country.

http://itnetworks.softing.com

For more information please contact:

General (Typical at 25°C)	
Weight	0.4 kg (0.88 lb)
Dimensions (w × h × d)	128x134x40 mm (5x5.28x1.58 in)
Optical Interfaces	
Interchangeable optical connectors	FC, SC, DIN, and ST
Technical Characteristics	
Laser safety class (21 CFR)	Class M1
Distance units	Kilometers, feet, and miles
Group index range	1.300000 to 1.700000 in 0.00001 steps
Number of data points	Up to 128,000 data points
Distance measurement	Automatic or dual cursor
Display range	3.25 m to 260 km
Cursor resolution	1 cm
Sampling resolution	4 cm
Accuracy	± 1 m $\pm 10^{-5}$ x distance $\pm$ sampling resolution (Excluding group index uncertainties)
Attenuation Measurement	
Automatic, manual, 2-point, 5-point, and LSA	
Display range	1.25 dB to 55 dB
Display resolution	0.001 dB
Cursor resolution	0.001 dB
Linearity	±0.03 dB/dB
Threshold	0.01 to 5.99 dB in 0.01 dB steps
Reflectance/ORL Measurements	
Reflectance accuracy	±2 dB
Display resolution	0.01 dB
Threshold	−11 to −99 dB in 1 dB steps
CW Source	
CW Source output power level	−3.5 dBm
Operating modes	CW, 270 Hz, 330 Hz, 1 kHz, 2 kHz, TWINTest
Power Meter	
Power level range	MM: −3 to −30 dBm SM: −2 to −50 dBm
Calibrated wavelengths	MM: 850 and 1300 nm SM: 1310, 1490, 1550, 1625, and 1650 nm
Measurement accuracy	MM[1]: ±1 dB (At -15 dBm) SM: ±0.5 dB (At -30 dBm)

Multimode and Quad OTDR Modules (Typical at 25°C)		
Central wavelength[2]	850/1300 ±30 nm	1310/1550 ±20 nm
Pulse width	3 ns to 1 μs	3 ns to μs
RMS dynamic range[3]	26/24 dB	37/35 dB
Event dead zone[4]	0.8 m	0.9 m
Attenuation dead zone[5]	4 m	4 m

1 Using a mode conditioner
2 Laser at 25°C
3 The one-way difference between the extrapolated backscattering level at the start of the fiber and the RMS noise level after 3-minutes averaging
4 Measured at ±1.5 dB down from the peak of an unsaturated reflective event
5 Measured at ±0.5 dB from the linear regression using an F/UPC-type reflectance