

T-BERD 6000 LITE Compact OTDR



Key Features

- Dedicated tool to locate faults and troubleshoot access/FTTx networks
- Simple one-button operation provides full OTDR functionality
- Most compact and highly integrated OTDR unit available yet does not compromise screen size or ease of use
- Performs thorough trace analysis
- Connection check functions available (VFL, power meter & video inspection probe)
- Exceeds Telcordia GR-196-CORE specifications (including ruggedness, drop testing, and extended battery life)
- Continuous wave (CW) laser source functionality



The JDSU T-BERD 6000 LITE Compact OTDR is an optimized optical test solution for Access/FTTx networks.

Compact and Highly Integrated

The advanced design of the T-BERD 6000 LITE keeps it lightweight, compact and flexible:

- Simple Optical Fault Locator
- Advanced Optical Time Domain Reflectometer (OTDR)
- On-board “Connection Checker” (optional VFL, power meter, continuous wave light source, and video inspection probe)

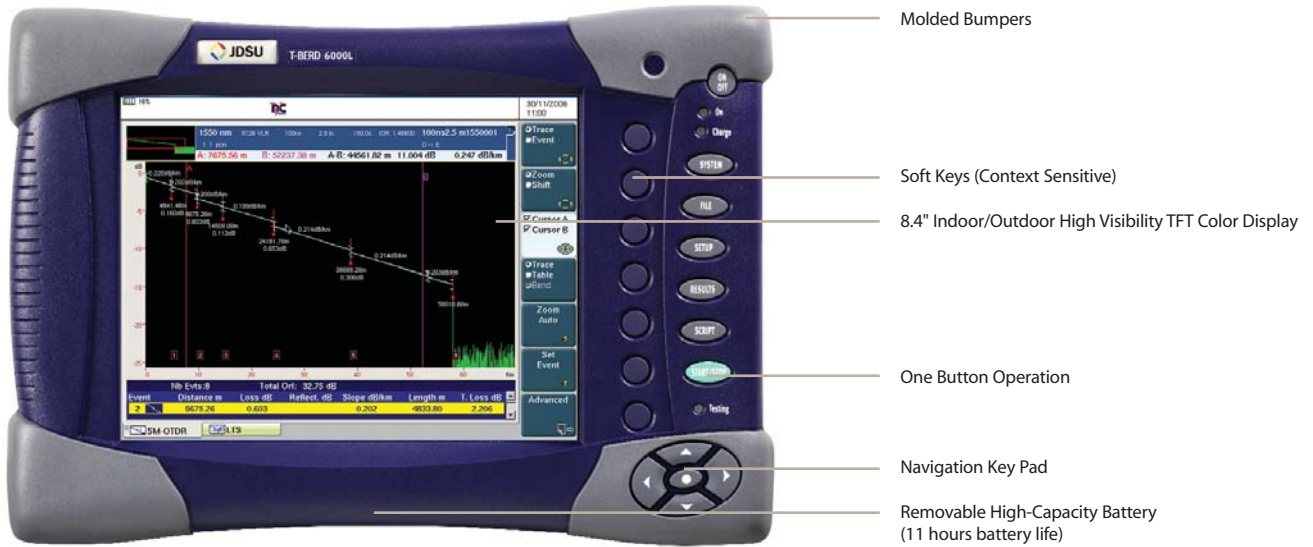
Field-Test Friendly

The T-BERD 6000 LITE is ideally suited for construction, turn-up, and maintenance of FTTx fiber networks. The unit features the best screen size in its class and is built for extended use in demanding conditions with a shock-resistant housing and long battery life.

Multi-Function

The T-BERD 6000 LITE performs critical tasks for maintaining efficient and reliable access/FTTx networks. For optimum performance, optical connectors must be clean, fibers must be free of macrobends, and technicians must be able to localize damage to patch cords and local runs. The T-BERD 6000 LITE Connection Check features provide a comprehensive localized test suite including Visual Fault Location (VFL), Power Meter, Continuous Wave Light Source, and Video Inspection Probe.

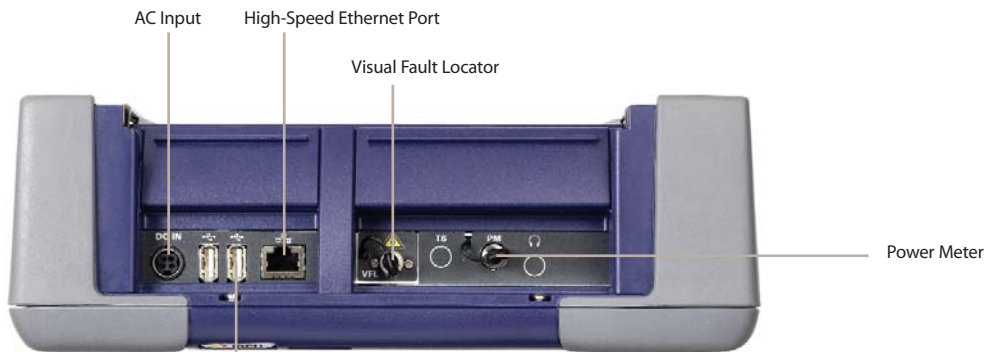
T-BERD 6000 LITE Unit Description



T-BERD 6000 LITE Front Panel



T-BERD 6000 LITE Right Side



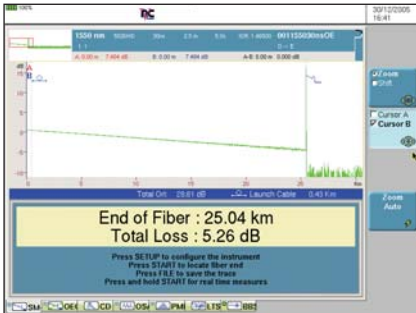
T-BERD 6000 LITE Top Side

(2) USB Ports
(Video probe, USB stick, mouse, keyboard on option)

Compact OTDR Solution

Fast and Precise Fault Location

The T-BERD 6000 LITE troubleshoots easily any break which could degrade fiber link quality. With its advanced and proprietary software, it enables any operator, with one key press, to instantly pinpoint any fault on the network. Its 4 cm resolution and up to 128,000 acquisition points enables the unit to provide the most accurate distance on the market.



Precise Fault location



Break/Fault location

- Fast detection
- Precise fault location
- One button automation
- No specific settings required
- Distance, loss and ORL measurements

Ideal for Construction and Maintenance

During the construction or repair of an FTTH network, the T-BERD 6000 LITE is the most compact unit enabling to display under one screen all the relevant information required for fiber qualification. The trace and table are displayed simultaneously, with direct access to cursors and zoom. All features found on dedicated, large construction OTDR units are available in the compact T-BERD 6000 LITE.



Trace and table displayed simultaneously

- Fully automatic or manual modes
- Templates for multi-fiber acquisitions
- Automatic, semi-automatic or manual measurements
- Multitrace display for trace comparison
- Auto filenaming and auto storage with comprehensive cable and fiber identifiers
- Large keyboard for easy edition

Easy Macrobend Detection

Macrobending is a temporary fault in the network which induces attenuation and reduces the optical power budget. Macrobends are sometimes mixed up with splices and a correct detection is important. The T-BERD 6000 LITE includes a new software feature which uses wavelength sensitivity to macrobends. It detects precisely and quickly any bending so that it becomes easy to remove from the network.



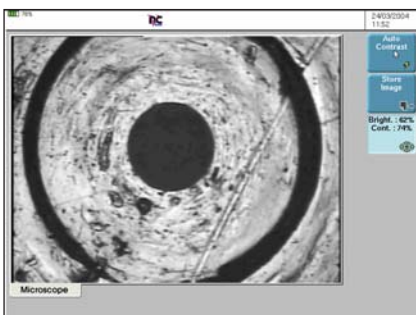
Macrobending detection



Macro bending

Connection checker

On a fiber link, the connectors are the most important elements to be checked. For this reason, the T-BERD 6000 LITE is provided with a Connection Check option, which can include a Visual Fault Locator, a Power Meter and a Video Inspection Probe. The large screen of the T-BERD 6000 LITE enables easy analysis of the connector quality.



Videoscope inspection display

General specifications
Display

TFT color, 8.4" LCD 800 x 600, high visibility (standard)

Storage and I/O Interfaces

 Internal memory 1000 test results
 2x USB, 1x RJ-45 Ethernet

Power Supply

 Battery type Removable battery
 AC/DC adapter Input 100-240 V, 50-60 Hz, Output 19V DC/3.1 A
 Operation time Up to 11 OTDR hours with standard display Telcordia GR-196-CORE

Size and Weight

 Size (l x h x w) 285 x 195 x 93 mm / 11.2 x 7.7 x 3.7 in
 Weight 3.4 kg / 7.5 lb

Environmental Specifications

 Operating temperature range (no options)
 -20° C to +50° C (-4° F to 122° F)
 Operating temperature range (all options)
 0° C to +40° C (32° F to 104° F)

 Storage temperature range -20° C to +60° C (-4° F to 140° F)
 Humidity, non-condensing 95%

OTDR Specifications

 Wavelengths¹ 1310/1550 nm ±20 nm
 Dynamic Range² (1310/1550 nm) 32/30 dB
 Event dead zone³ 2.5 m
 Attenuation dead zone⁴ 8 m
 Sampling resolution from 4 cm
 Nb of acquisition points up to 128 000
 Attenuation linearity ±0.03 dB/dB
 Reflectance accuracy ±2 dB
 Distance accuracy
 ±1m ±sampling resolution ±1.10⁻³ x distance
 Distance range up to 260 km
 Refresh time from 0.1 s

¹Laser at 25° C and measured at 10 μs

²The one way difference between the extrapolated backscattering level at the start of the fiber and the RMS noise level, after 3 minutes averaging.

³Measured at ±1.5 dB down from the peak of an unsaturated reflective event.

⁴Measured at ±0.5 dB from the linear regression using a FC/PC type reflectance.

Optical Interfaces (optional) - Typical 25° C
Power meter

 Power level +10 to -55 dBm
 Calibrated wavelengths 850, 1310, and 1550 nm
 Connector type Universal push/pull (UPP)

VFL

 Wavelength 635 nm ±15 nm
 Output power level <1 mW
 Laser safety Class 2 laser
 Connector type Universal push/pull (UPP)

Video Inspection Probe

Magnification 250X or 400X, through the USB port

Ordering information
Base Unit

 T-BERD 6000L 32/30 dB 1310/1550 nm OTDR ETB6026VSRE
 Continuous source option E810TDRLS

Optical Interfaces (optional)

 VFL with UPP connector E80VFL
 Optical power meter with UPP connector (2.5 mm provided as standard) E80PM
 Optical Inspection Probe 250x through USB EFSCOPE250
 Optical Inspection Probe 400x through USB EFSCOPE400

Application Software

 Optical FiberTrace software (for post-analysis) EOF5100
 Optical FiberCable software (for acceptance report generation) EOF5200

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