MTS-6000 LITE
Compact OTDR

2007 FROST & SULLIVAN
Global Communications Test & Measurement Company of the Year Award

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 MTS-6000 LITE Compact OTDR is an optimized optical test solution for Access/FTTx networks.

Compact and Highly Integrated

The advanced design of the MTS-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 MTS-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 MTS-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 MTS-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.

MTS-6000 LITE Unit Description

Molded Bumpers

Soft Keys (Context Sensitive)

8.4" Indoor/Outdoor High Visibility TFT Color Display

One Button Operation

Navigation Key Pad

Removable High-Capacity Battery
(11 hours battery life)

MTS-6000 LITE Front Panel

OTDR connector with universal adapter
for any fiber type
(Continuous wave light source on option)

MTS-6000 LITE Right Side

AC Input

High-Speed Ethernet Port

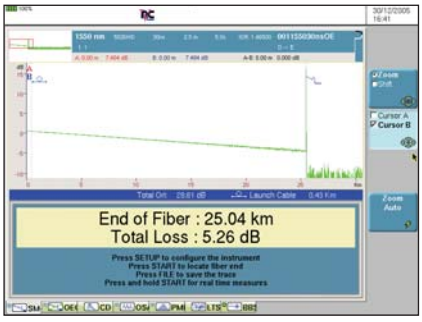
Visual Fault Locator

Power Meter

MTS-6000 LITE Top Side

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

Compact OTDR Solution

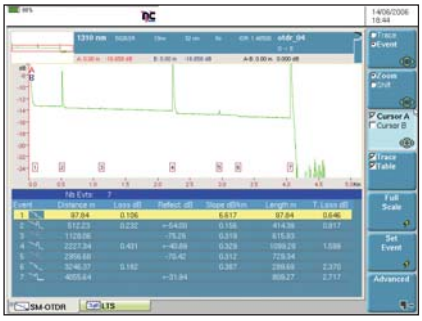


Precise Fault location

Fast and Precise Fault Location

The MTS-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.

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



Trace and table displayed simultaneously

Ideal for Construction and Maintenance

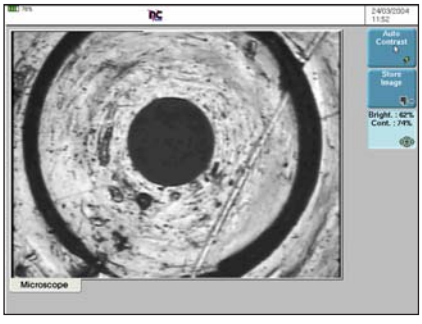
During the construction or repair of an FTTx network, the MTS-6000 LITE is the most compact unit enabling to display under one screen all the relevant information required for fiber qualification. The trace and table are displayed simultaneously, with direct access to cursors and zoom. All features found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

– 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

Macrobending detection

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 MTS-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.



Videoscope inspection display

Connection checker

On a fiber link, the connectors are the most important elements to be checked. For this reason, the MTS-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 MTS-6000 LITE enables easy analysis of the connector quality.

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

Wavelengths[1]	1310/1550 nm ±20 nm
Dynamic Range[2] (1310/1550 nm)	32/30 dB
Event dead zone[3]	2.5 m
Attenuation dead zone[4]	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^{-5} x distance
Distance range	up to 260 km
Refresh time	from 0.1 s

[1]Laser at 25° C and measured at 10 µs

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

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

[4]Measured 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

MTS-6000L 32/30 dB 1310/1550 nm OTDR	EM6026VSRE
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)	EOFS100
Optical FiberCable software (for acceptance report generation)	EOFS200

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