





# Enabling Australia's Field Technicians to build, troubleshoot and maintain better communications networks.



This reference material is provided by TMG Test Equipment, VIAVI's only Master Distributor for Contractors in Australia



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Compact OTDR



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## 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.

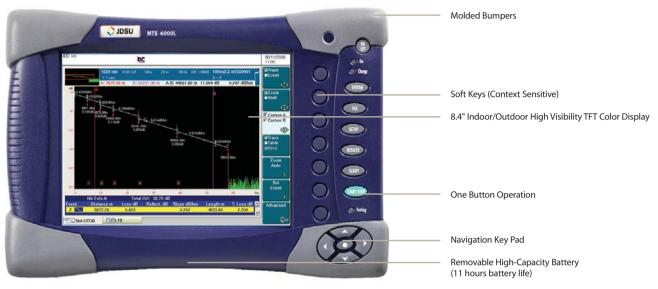
## MTS-6000 LITE COMPACT OTDR

## MTS-6000 LITE Unit Description

OTDR connector with universal adapter

(Continuous wave light source on option)

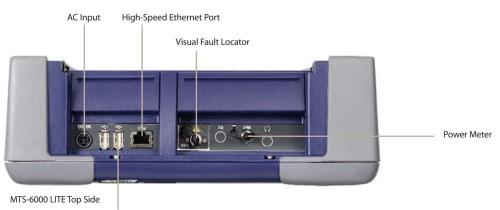
for any fiber type



MTS-6000 LITE Front Panel



MTS-6000 LITE Right Side



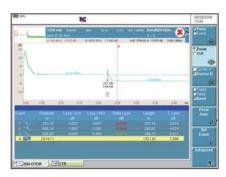
(2) USB Ports (Video probe, USB stick, mouse, keyboard on option)



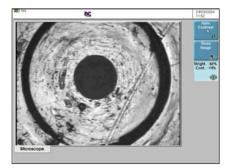
Precise Fault location



Trace and table displayed simultaneously



Macrobending detection



Videoscope inspection display

## **Compact OTDR Solution**

## **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

## **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

## **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.



## **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 specifica	tions				
Display					
TFT color, 8.4, LCD 800 x 6	00, high visibility (star	ndard			
Storage and I/O Interfa	res				
Internal memory	1000 test i	results			
	2x USB, 1x RJ-45 Etl	herne			
Power Supply					
Battery type	Removable b	attery			
AC/DC adapter Input 100	)-240 V, 50-60 Hz, Output 19V DC	:/3.1 <i> </i>			
Operation time	Up to 11 OTDR hours with sta	ndaro			
	display Telcordia GR-196	-CORI			
Size and Weight					
Size (l x h x w)	285 x 195 x 93 mm /11.2 x 7.7 x	3.7 iı			
Weight	3.4 kg /	7.5 II			
Environmental Specifica	itions				
Operating temperature ra	nge (no options)				
	-20° C to +50° C (-4° F to 1	22° F			
Operating temperature ra	nge (all options)				
	0° C to +40° C (32° F to 1	04° F			
Storage temperature rang	e $-20^{\circ}$ C to $+60^{\circ}$ C (-4° F to 1	40° F			
Humidity, non-condensing	]	95%			
OTDR Specifications					
Wavelengths <sup>1</sup>	1310/1550 nm ±	20 nn			
Dynamic Range <sup>2</sup> (1310/15	50 nm) 32/	/30 dl			
Event dead zone <sup>3</sup>		2.5 n			
Attenuation dead zone <sup>₄</sup>		8 n			
Sampling resolution	fron	n 4 cn			
Nb of acquisition points	up to 12	up to 128 000			
Attenuation linearity	±0.03	dB/dl			
Reflectance accuracy	:	±2 d£			
Distance accuracy					
±1m ±	ampling resolution $\pm 1.10^{-5}$ x dis	stance			
Distance range	up to 2	60 km			
Refresh time		n 0.1 :			
Laser at 25° C and measur	red at 10 μs				

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 m\				
Laser safety	Class 2 lase				
Connector type	Universal push/pull (UPP				
Video Inspection Probe					
Magnification	250X or 400X, through the USB por				
Ordering informa	tion				
Base Unit					
MTS-6000L 32/30 dB 131	0/1550 nm OTDR EM6026VSR				
Continuous source option	E810TDRL				
<b>Optical Interfaces (optic</b>	onal)				
VFL with UPP connector	E80VF				
	UPP connector (2.5 mm provided as				
standard)	E80PN				
Optical Inspection Probe 2	250x through USB EFSCOPE250				
Optical Inspection Probe 2 Optical Inspection Probe 2	5				
• •	5				

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

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

minutes averaging.

<sup>3</sup>Measured at  $\pm 1.5$  dB down from the peak of an unsaturated reflective event.

 $^{\circ}$ Measured at ±0.5 dB from the linear regression using a FC/PC type reflectance.

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