



# T-BERD<sup>®</sup>/MTS-2000 Handheld Modular Test Set

Fiber Optic Multitest Tool for Smarter, Faster  
Field Testing



Costs, workflow, quality, network performance, and customer experience are critical for the success of today's fiber optic networks. Selecting the right test tools has become key toward meeting these needs. The Viavi Solutions™ T-BERD/MTS-2000 is a handheld multi-test platform that provides field technicians with a single handheld unit to install, turn-up and maintain these networks to the highest standards.

Its innovative design and hands-free bag ensure that all essential fiber test tools are close at hand, whatever the job or location. A large color screen with graphical user interface drives simple operation and optimal workflow in the field.

Test capabilities include a range of OTDR modules for multimode and single-mode testing, as well as a range of FiberComplete™ modules for automated insertion loss/optical return Loss (IL/ORL), and fault finding. Both OTDR and FiberComplete modules are passive optical network (PON) optimized. The unit is also ready for connector end face pass/fail analysis to IEC standards with a digital analysis microscope.

The PON power meter and CWDM-OSA modules also enable turn-up and troubleshooting of PON and coarse wavelength division multiplexing (CWDM) networks.

## Key Benefits

- Certify the fiber physical layer on FTTx/PON, access, metro and enterprise networks
- Ensure the highest-quality connectorizing, splicing, and turn-up of new fiber links
- Improve workflow with hands-free solution, driving best practices to IEC standards
- Smarter and faster field testing with simple setup and instantaneous pass/fail results
- Boost productivity with improved report generation and flexible connectivity
- Decrease OpEx and increase field productivity when combined with StrataSync™, cloud-enabled software that displays assets, modules, versions, and locations; maintains accurate instrument configuration and setup; and, provides visibility into instrument utilization and test-data management

## Applications

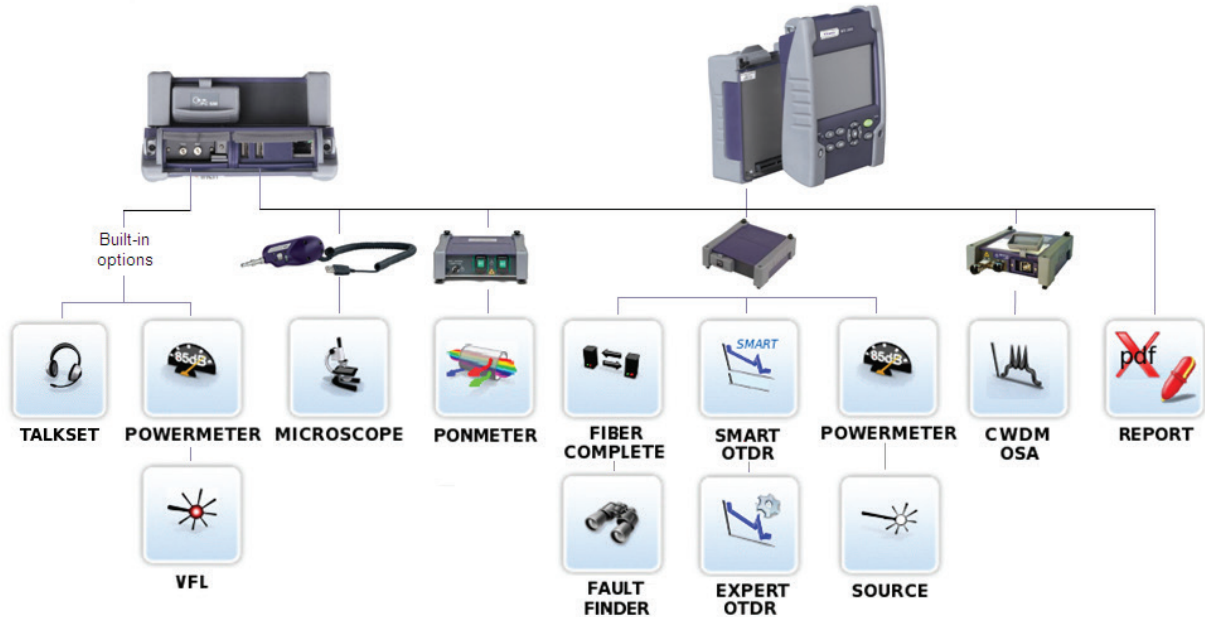
- High-visibility touch-screen display
- Field-installable modules
- Wide range of OTDR modules including Quad and PON
- FiberComplete automated IL/ORL, PON power meter, and CWDM analyzer
- Automated fiber inspection and IEC pass/fail analysis
- Optional built-in optical power meter, visual fault locator (VFL), and optical talk set
- New-generation lithium polymer (LiPo) battery for 8-hour operation
- Flexible connectivity with Ethernet, USB, Bluetooth®, and WiFi capabilities
- Special hands-free bag standard
- Cross-compatible with T-BERD/MTS-4000



## Widest Range of Applications for Maximum Flexibility

The T-BERD/MTS-2000 provides the largest range of test capabilities offered in one handheld unit. The modular design allows service providers the maximum flexibility to scale their investment and evolve with the growth of their network.

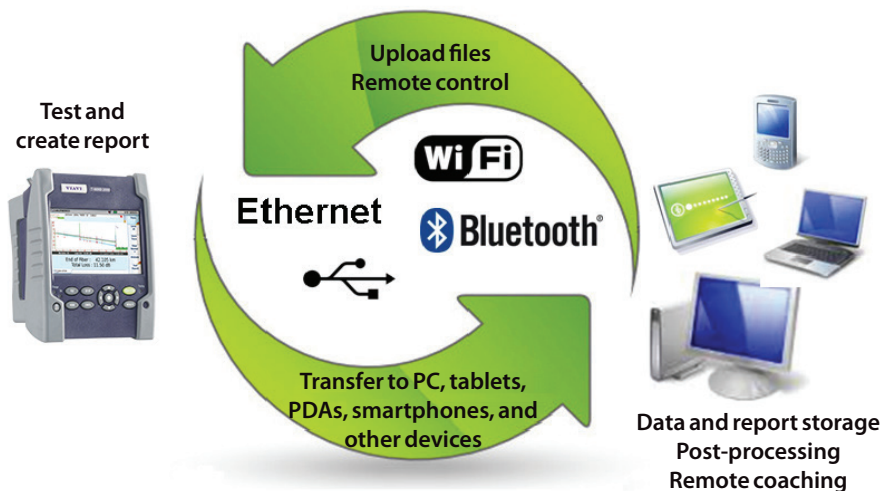
The instrument supports the whole range of essential fiber analysis tools including connection inspection, connection check, source, ORL, OTDR, a power meter, a PON selective power meter, and CWDM optical spectrum analyzer.



Application modules used with the T-BERD/MTS-2000 can also be used with the T-BERD/MTS-4000 and the two products are interoperable.

## Boosted Productivity with Seamless Data Workflow

The T-BERD/MTS-2000 integrates various communication capabilities allowing remote control, data and setup uploads/downloads, and report transfer. The unit has one high-speed 1G Ethernet port, three USB ports, and optional WiFi and Bluetooth network connections.



## T-BERD/MTS-2000 Design Optimizes Operational Efficiency



- 1 5-inch touch screen
- 2 Charge indicator
- 3 On indicator
- 4 File menu
- 5 Setup menu
- 6 Start/Stop
- 7 Testing indicator
- 8 On/Off
- 9 Home page
- 10 Cancel
- 11 Direction and validation keys
- 12 Results page
- 13 Loudspeaker
- 14 Headset jack
- 15 AC/DC input
- 16 Slave mini USB port
- 17 RJ45 connector
- 18 Master USB ports (2)
- 19 Power meter port
- 20 VFL or talk set port
- 21 WiFi and Bluetooth options
- 22 Stylus for touch screen





## StrataSync — Empower Your Assets

StrataSync is a hosted, cloud-enabled solution that provides asset, configuration, and test-data management of Viavi instruments and ensures that all have the latest software and options installed. StrataSync manages inventory, test results, and performance data anywhere with browser-based ease and improves technician and instrument efficiency. StrataSync manages and tracks test instruments, collects and analyzes results from the entire network, and informs and trains the workforce.

### Specifications

General (typical at 25°C)	
Display	5-inch TFT color touch screen (12.5 cm) Resolution 800 x 480 WVGA
Interfaces	Two USB 2.0 ports One mini-USB 2.0 port RJ45 LAN 10/100/1000 Mbps Built-in Bluetooth (optional) Built-in WiFi 802.11 b/g/n (optional)
Internal memory	1 GB (128 MB for storage)
Battery	Rechargeable lithium-polymer battery 8-hour operation as per Telcordia GR-196-CORE
Power supply	AC/DC adapter, input 100-250 V AC, 50-60 Hz; 2.5 A max, output 12 V DC, 25 W Electrical safety: EN60950-compliant
Size with module (H x W x D)	175 x 138 x 80 mm (6.9 x 5.4 x 3.2 in)
Weight with battery with battery and LM OTDR	0.864 kg (1.89 lb) 1.21 kg (2.67 lb)
Operating temperatures No options/modules With options/modules	-20 to +50°C (-4 to 122°F) 0 to +40°C (32 to 104°F)
Relative humidity	0% to 95% noncondensing
Built-In Power Meter <sup>1</sup>	
Calibrated wavelengths	850/1310/1490/1550/1625/1650
Wavelength range	800 to 1650 nm in 1 nm steps
Accuracy <sup>2</sup>	±0.2 dB
Measurement range <sup>3</sup>	+5 to -50 dBm
Maximum resolution	0.01 dB/0.01 nW
Connector type	Universal push pull (UPP)

1. At 25°C, after 20 minutes stabilization time and after zero setting.
2. At calibrated wavelength (except 1650 nm)
3. -45 dBm from 800 to 1250 nm

Built-In Visual Fault Locator (VFL)	
Wavelength	650 nm
Emission mode	CW, 1 Hz
Laser class	Class 2 per standards EN60825-1 and FDA21 CFR Part 1040.10
Built-In Talk Set	
Dynamic range	32 dB (typical)
Connector types	SC, FC, and UPP (three adapters included)

### Ordering Information

Description	Part Number
<b>T-BERD/MTS-2000 Handheld Modular Test Set</b> Includes: touch screen, hands-free soft case, shoulder strap, power supply with 5 adaptable plugs (US, Europe, UK, Australia, Japan), one USB cable, one Getting Started manual	ETB2000HVT/ EM2000HVT
Built-in optical power meter and VFL, with 2.5 mm UPP connectors	E20PMVFL
Built-in optical power meter with 2.5 mm UPP connector	E20PM
Built-in visual fault locator (VFL) with 2.5 mm UPP connector	E20VFL
Built-in optical power meter and talk set	E20TSPM
Bluetooth option for T-BERD/MTS-2000 Modular Test Set	E20BLUE
USB2.0 digital video scope kit (P5000i), including 7 tips and soft case	EDFSCOPE5Ki
Soft carrying case for T-BERD/MTS-2000/4000	E40SCASE1
Hard carrying case for T-BERD/MTS-2000 Modular Test Set	E20HCASE
12 V car adapter for T-BERD/MTS-2000/4000	E40LIGHTER



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To reach the Viavi office nearest you, visit [viavisolutions.com/contacts](http://viavisolutions.com/contacts).

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