T-BERD®/MTS-4000 Platform

Multiple Services Test Platform

Key Features

- **Cost-effective, dual-modular and handheld platform**
- **Large 7-inch display (touchscreen option)**
- **Comprehensive connection checker functionality with built-in VFL, power meter, and scope**
- **Flexible connectivity including USB, high-speed 1G Ethernet, WiFi, and Bluetooth interfaces**
- **Automated test and data reporting capability**
- **Integrated web browser**

Applications

- Qualify Access/FTTx networks
- Troubleshoot fiber- and copper-based networks
- Test and turn up of passive optical (PON) or point-to-point optical networks
- Test and turn up triple-play services, including IPTV and VoIP measurements from DSL access interfaces or standard Ethernet port

Access network technologies are evolving quickly to keep pace with consumer demand for high-bandwidth services. Offerings such as high-speed Internet access, high-definition TV, and video on demand are pushing network performance requirements to new levels while increasing the complexity for technicians who turn up, troubleshoot, and maintain services. As a result, service providers must equip technicians with a single, scalable, and easy-to-use test tool that can address a wide range of test applications—quickly and accurately—under any field conditions.

The T-BERD/MTS-4000 is the one tool providers and technicians both can rely on, because it provides:

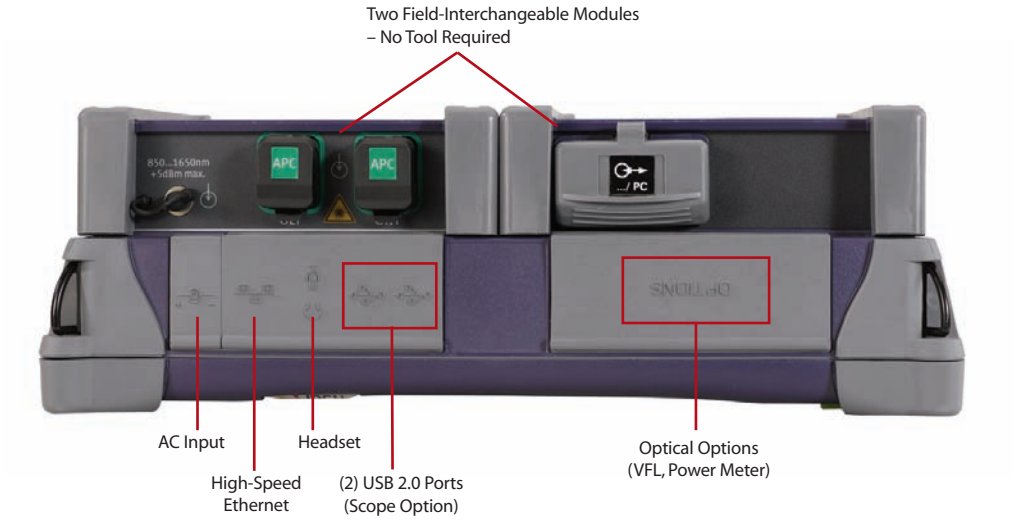
– The industry's first single handheld test platform that combines advanced fiber, copper, and triple-play testing capabilities.

– A multi-function, scalable solution that offer several test applications, which enables a quick return on investment.

– Multilayer testing to reduce turn-up and installation time.

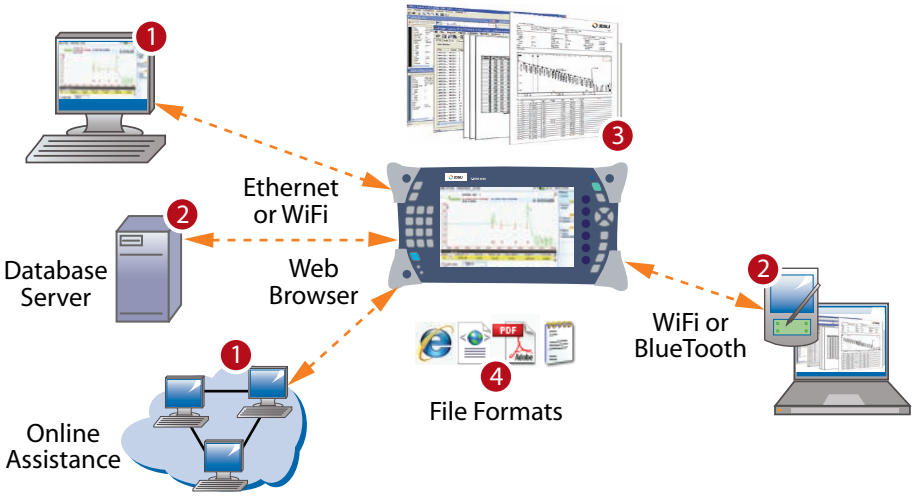
– An easy-to-use, icon-based graphical user interface (GUI) that enables testing with minimal training.

The T-BERD/MTS-4000 is a highly integrated platform that features two module slots, a large 7-inch color screen (with a touchscreen option), a high-capacity Lithium-Ion battery, an optional video inspection scope (through universal serial bus [USB] port), and optional built-in optical test functions, such as a visual fault locator (VFL), power meter, and optional WiFi/Bluetooth interface.



More than a Test Unit

The T-BERD/MTS-4000 comes with unprecedented connectivity features such as high-speed Ethernet (1 GigE), WiFi, Bluetooth, and on-board Web browser. Combining these features with an ergonomic and intuitive GUI, the T-BERD/MTS-4000 offers user-friendly functions such as intranet/Internet access, wireless data transfer, automated testing, and remote operations.



1 Remote Access

Control the T-BERD/MTS-4000 via Internet/intranet and WiFi

- Operate the unit from a computer
- Remote assistance from any expert user
- Download result files through the FTP server within the unit

2 Data Transfer via WiFi/Bluetooth and Ethernet

Transfer data easily with a computer or personal digital assistant (PDA)

- Download reference traces and settings from database
- Send measurement results via e-mail

3 Automated Testing

Reduce operating time for technicians

- Define testing procedures to automate the test process (script)
- Automate data reporting

4 User-friendly Functions

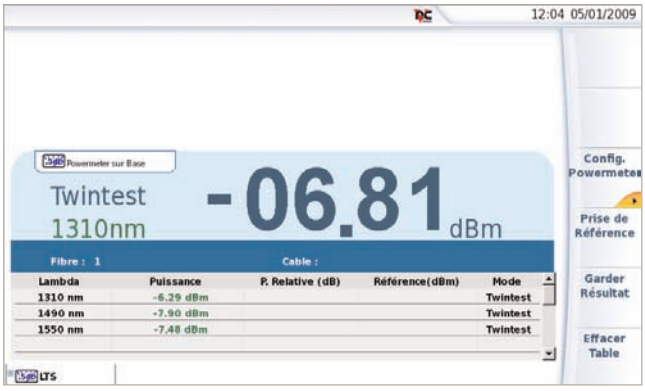
On-board Web browser and HTML/XML/TXT/PDF reader

- Save results with test record information in HTML, XML, TXT or PDF
- Download files from the Web and consult documents, such as the T-BERD/MTS-4000 User's Manual or Quick Guide.

Overview of T-BERD/MTS-4000 Test Features

Broadband Power Meter

The T-BERD/MTS-4000 comes with optional built-in power meters that let technicians easily verify the presence of a signal. The large screen of the T-BERD/MTS-4000 displays power values in large fonts, allowing for immediate interpretation of results.



T-BERD/MTS-4000 built-in power meter interface with enlarged font for immediate interpretation

Visual Fault Locator

The VFL features, available as an option on the T-BERD/MTS-4000 platform, offers built-in 635 nm visual fault location on a universal connector.

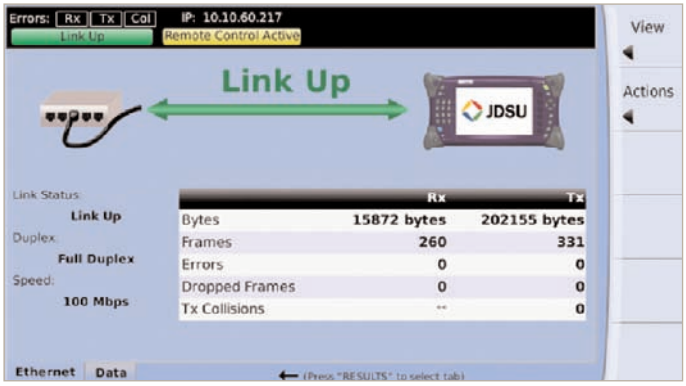
Video Inspection Probe

The optional fiber inspection probe facilitates the Inspect Before You Connect℠ process. The T-BERD/MTS-4000 offers this capability through a USB port connection, which allows for quick and easy inspection of connector end faces for contamination and also enables capturing the image and storing it in jpeg format.

Connector end face on the T-BERD/MTS-4000 high-resolution screen

Ethernet Testing

The T-BERD/MTS-4000 enables Internet connectivity testing using an integrated Web browser and also performs required Internet Protocol (IP) data tests, including IP Ping and File Transfer Protocol (FTP) testing, to verify bandwidth requirements for real-time applications and services (such as online gaming and streaming video).



Example of a Ethernet testing screen using the T-BERD/MTS-4000

Comprehensive Line of Accessories

A wide range of accessories are available that provide technicians with everything they need to maximize the complete testing capabilities of the T-BERD/MTS-4000.

The T-BERD/MTS-4000 with the optional mouse, keyboard, headset, USB memory stick, Soft carrying case and video inspection scope

Specifications

T-BERD/MTS-4000 Technical Specifications (Typical 25°C)

Display

TFT color, 7-in, LCD 800 x 480, high visibility for outdoors	
Touchscreen, TFT color, 7-in, LCD 800 x 480, high visibility for outdoors	

Storage and I/O Interfaces

Internal memory	32MB (1000 test results)
Extended memory (optional)	Minimum 1 GB (optional)
	2x USB2.0, 1x RJ45 Ethernet (up to 1 Gb/s)
WiFi	Standard IEEE 802.11 b/g
Bluetooth	Class 2, up to 10 m range
Audio interface	2.5 mm jack connector
Ethernet	10/100/1000 MHz full-half duplex

Power Supply

Battery type	Standard removable Li-Ion batteries
AC/DC adapter	Input 100-250 V, 50-60 Hz
	Output 12-15V DC/3.7 A
Electrical safety	EN 60950 Compliant
Operation time	Up to 11 hours with standard display
	Telcordia GR-196-CORE

Size and Weight

Mainframe with two modules and battery (W x H x D)	260 x 135 x 90 mm (10.2 x 5.3 x 3.5 in)
Mainframe only (with battery)	1.4 kg (3 lb)
Mainframe with one module (with battery)	<2 kg (<4.35 lb)

Environmental Specifications

Operating temperature range (no option)	–20 to +50°C (–4 to 122°F)
Operating temperature range (all options)	0 to +40°C (32 to 104°F)
Storage temperature range	–20 to +60°C (–4 to 140°F)
Humidity, non-condensing	95%

Base Unit Optical Interfaces (optional)

Power Meter

Power level	+10 to –60 dBm
Calibrated wavelengths	850, 1310, and 1550 nm
Connector type	Universal push/pull (UPP)

Visual Fault Locator (VFL)

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

Quick Capture Probe Kit (via USB)

Magnification	200X and 400X
Interface	through the USB port
Tips	FC, SC, SC-APC, LC, U25, U25MA, U12

For more information on module specifications, refer to each module data sheet.

Ordering Information

Base Instrument

T-BERD/MTS-4000 Platform with high-visibility color display and battery pack	TB4000, M4000
T-BERD/MTS-4000 Platform with high-visibility touchscreen color display and battery pack	TB4000T, M4000T
Extended memory (1 GB)	40EXTMEM
VFL with 2.5 mm UPP	40VFL
Optical power meter with UPP	40PM
Optical high-power power meter with UPP	40HPPM
WiFi/Bluetooth interface	40WIFIBLU

Main Modules

Last Mile OTDR module	E41xxLM, E41xxRLM
PON Selective Broadband Power Meter module	2295/xx
Copper module	4000-CU
VDSL module	4000-VDSL-INF
Combo Copper VDSL	4000-CU-VDSL-INF
(Refer to the separate datasheets for specifications)	

Accessories

Quick capture video microscope, 7 tips included, 200x/400x with USB converter	xFSCOPE400
Additional Li-Ion rechargeable battery	xLIION9C

Contact JDSU today for more information about equipping field technicians with the T-BERD/MTS-4000 platform—the ideal solution for complete testing of next-generation fiber and copper Access networks and triple-play services throughout the physical and service layer life cycle.

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