T-BERD8000 Tester

Loss Test Set, Talk Set and VFL Functions

Key Features

- **Built-in functions for permanent availability**
- **Multi-tasking allows continuous running function for immediate connection check**
- **Quick save front connector image**
- **Universal Push Pull connector for easy connection/ disconnection of 2.5 and 1.25mm ferrule**
- **Live fiber identification before measurement**

Built-in optical functions to qualify jumpers, launch cables and connectors on-line.

Productivity and accuracy in commissioning and maintaining fiber networks often requires additional tools to ensure jumpers and launch cables continuity, as well as connector cleanliness. Missing solutions may incur not only long delays in fault fixing, but also incorrect measurement reporting, resulting in higher cost tojob completion.

JDSU's T-BERD8000's built-in "connection check" functions meet the technicians demands in offering faster time to test, higher measurement reliability, quick troubleshooting, as well as permanent availability.

Combining VFL, Power Meter, and Inspection scope, the T-BERD8000 test platform offers a lightweight, rugged field instrument suitable for any optical test applications.

In addition to the various measurement applications, the flexibility of the test platform allows for measurement capability and functionality enhancements.

Given our long standing experience and knowledge in the field of optical network testing, manufacturers, installers, and fiber network operators look to JDSU for industry leading test platform solutions.

The instrument can be used for outside (OSP) or inside plant (CO) environments. The intuitive user interface offers easy access for novice technicians and provides advanced analysis capabilities for expert users.

The T-BERD8000 test platform's powerful communication capabilities offers users the ability to remotely control the unit, send data directly to the office, or access data via the internet.

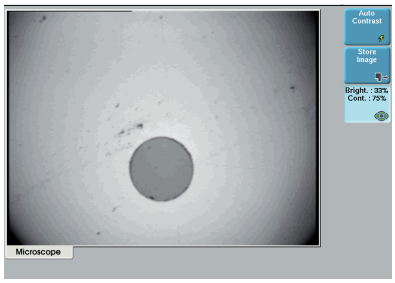


Figure 1: Connector surface inspection

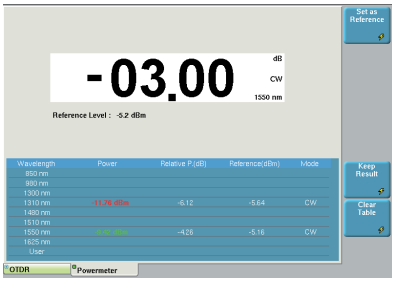


Figure 2: Jumper loss measurement

Rugged field solution

Housed in the field dedicated T-BERD8000 platform, visual fault location, power measurement, and fiber connector inspection can be performed in OSP, CO, and harsh environmental conditions.

A portable, battery-powered instrument, shockproof and drop tested for complete reliability in the field.

Quick Jumper/Patchcord check with VFL

Considered a mandatory tool for any technician dealing with fiber patchcords and launch cables, the built-in visible light source allows for quick fiber continuity checks and visual break location, without the need of additional tools.

Power Level Measurement with Optical Power Meter

Essential tool for quick power level measurement on live fiber, the built-in power meter keeps the instrument on line, without the use of additional test equipment.

In addition to the power level, easy loss measurement of a jumper or patchcord is provided, when the visual check detects a failure.

Connection quality check with Fiber Inspection scope

Serving as a complementary tool during installation and maintenance, the optical inspection scope allows for quality verification of the front connector, when problems occur during measurement or system turn-up. The use of the video probe allows for visualization of the connector in a safe environment, even if the fiber is active.

It offers ability to generate trouble tickets when problems occur during final commissioning.

Built-in Talk set allows for communication along the fiber with “first-to-market” data transfer capability

The T-BERD8000 offers a built-in talk set option allowing communication between both ends of the fiber while the test is running. In addition, the user can send commands or transfer results to the product at the other end for immediate comparison or remote control.

It provides a permanent and cost effective solution for communication where mobiles or telephone lines are not available. A data transfer function allows immediate far end results and performs bi-directional OTDR analysis, saving a huge amount of transport time.

Easiest to use one-button operation

One button operation gives technicians access to these functions in a single selection. The multi-tasking operation permits access to the connection toolswhile running test measurements such as OTDR, OSA, PMD…

Flexibility and productivity improvement

Offering in depth diagnostics when measurement problems occurs, these functions are aimed at making the technicians job more efficient. The Built-in solutions provide continuous availability of thetools needed to get the test measurements quickest and with highest accuracy.

Specifications

T-BERD8000 BASE

(typical at 25 °C)

Display

	TFT color, 10'4 inches, LCD 800 × 600
	TFT color, 10'4 inches, LCD 800 × 600,High visibility
	Touchscreen TFT color, 10'4 inches, LCD 800 × 600, High visibility

Storage

Internal memory	16 MB
Hard disk (optional)	min 20 GB
Floppy disk drive (optional)	3.5 inches, MSDOS compatible
CD read/write (optional)	

Input/output interfaces

RS232C, 2 × USB, VGA RJ11 modem (optional), R45 Ethernet,

Power supply, battery

Battery type	standard removable Li-Lon batteries
Operation time	up to 16 OTDR hours with two batteries and standard display, Telcordia GR-196-CORE
Internal charger	yes
Charging time	<3 hours per battery
Trickle charge	yes
DC input	19 to 25 V
Power supply, AC/DC adapter	Input 100 to 240 V, 50 to 60 Hz, 1.8 A, output 19 V DC/3.1 A

Size (w × h × d)

Mainframe only (with back plate)	320 × 265 × 55 mm/ 11.6 × 10.4 × 2.1 inches
Mainframe + 1 plug-in module + Battery pack	260 × 320 × 116 mm/ 10.24 × 12.6 × 4.5 inches

Weight

Mainframe only (with back plate)	2.9 kg/6.39 lbs
Mainframe + 1 plug-in module + Battery pack (with one battery)	5.4 kg/11.9 lbs

Optical interfaces (optional)

Power meter

Power level	+10 to –55 dBm,
Calibrated wavelengths	850, 1310, 1550 nm
Connector type	universal push/pull

Talk set

Wavelength	1550 nm ± 20 nm
Dynamic range	>45 dB
Function	With data/file transfer,
Laser safety	Class 1 laser,
Connector type	Field interchangeable

VFL

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

CW light source

Wavelengths (selection)	1310/1550/1625 nm
Output power level	-3.5 dBm
Spectral width	<5 nm
Stability in 15 min	± 0.02 dB
Stability in 8 hours	± 0.2 dB
Laser Safety	Class 1 laser
Connector type	Field interchangeable

Environmental specifications

Temperature range

Operating on mains (no options)	–20 °C to +50 °C (–4 °F to 122 °F)
Operating, all options	0 °C to +4 °C (32 °F to 104 °F)
Storage	–20 °C to +60 °C (–4 °F to 140 °F)
Humidity	95% without condensing
EMI/ESD	CE compliant

Video connector inspection scope technical specifications (Typical at 25°C)

Video probe physical characteristics

Operating temperature	0 °C/50 °C
Storage temperature	-20 °C/50 °C
Humidity	95% Non condensing
Interface	USB 1.1

Optical characteristics

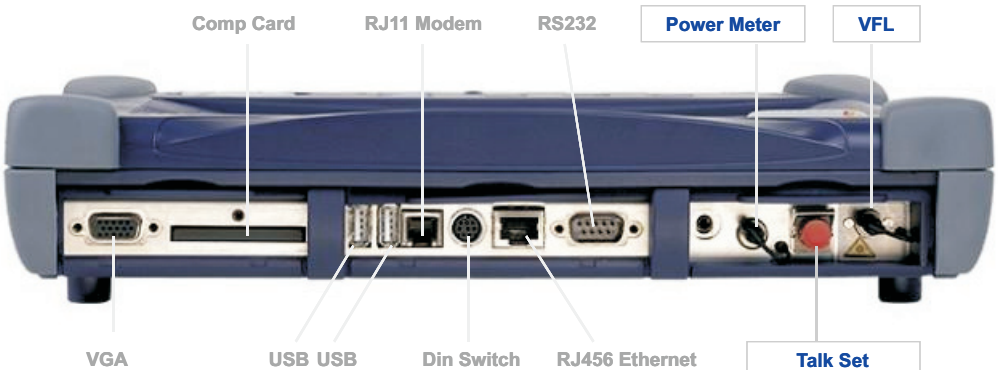
Magnify	up to 400×
Max. Input Power	+30 dBm

Connector tips

Tips for patchcord male connectors	UPP2.5 mm, UPP1.25mm
Connector tips for bulkhead adapter	FC; SC; FC/APC; SC/APC; LC; MTRJ; MU

Storage

File format	JPEG, BMP



Ordering information

Base instrument options

EM8000bt	T-BERD8000 platform with battery pack
E8100	2-slot receptacle
E80HVCol	High visibility TFT color display
E80HVTCol	High visibility touchscreen TFT color display
E80Hdisk	Hard disk drive
E80FD	Extractable floppy disk drive
E80CDRW	Extractable R/W CD-ROM drive
E80MDM	Built-in PSTN modem
E80VFL	VFL with UPP connector
E80TS	Optical talk set
E80PM	Optical power meter with UPP connector (2.5 mm provided as standard)
E8036LTSTS	Optical loss test set with talk set 1310/1550/1625 nm

Main accessories

E80keyB	External keyboard
E80LiLon	Additional Li-Lon rechargeable battery
E80Scase1	Wrap around soft carrying case for T-BERD8000 and 2 plug-ins receptacle configuration
E80Scase2	Soft carrying case for long configuration
E80Scase3	Soft carrying case for T-BERD8000 and 2-slot receptacle, or transport or OSA-160/200 module
E80Hcase	Hard transit case for long configuration
C80Hcase5	Hard carrying case for T-BERD8000 and 2-slot receptacle, or transport or OSA-160200 module

Application software

OFS100	Optical FiberTrace software (for post-analysis)
OFS200	Optical FiberCable software (for cable acceptance report generation)

Universal optical connectors

EUNIPCFC, EUNIPCSC, EUNIPCST, EUNIPCDIN, EUNIPCLC, EUNIAPCFC, EUNIAPCSC, EUNIAPCST,
EUNIAPCDIN, EUNIAPCLC

Optical connector inspection scope

EOFSCOPE250	Optical Fiber Microscope 250× through USB
EOFSCOPE400	Optical Fiber Microscope 400× through USB

Tips for optical connector inspection scope

ETIPU25MM	Universal patchcord tip for 2.5mm ferrule
ETIPU125MM	universal patchcord tip for 1.25mm ferrule
ETIPFCPC	FC/PC tip for bulkhead adapters
ETIPFCAPC	FC/APC tip for bulkhead adapters
ETIPSCPC	SC/PC tip for bulkhead adapters
ETIPSCAPC	SC/APC tip for bulkhead adapters
ETIPSTPC	ST/PC tip for bulkhead adapters
ETIPLC	LC tip for bulkhead adapters

For more information on test adapters, cables and fiber optic couplers, see the separate datasheet "JDSU fiber optic test adapters and cables"

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