

T-BERD®/MTS-6000/-8000 Platforms

Optical Broadband Source (BBS) Module



Key Benefits

- One unique solution for measuring CD, PMD, and AP
- Shock-proof and vibration-proof instrument has no moving parts
- Works with both the T-BERD/MTS-6000 and T-BERD/MTS-8000 platforms
- Tests high-performance components

The JDSU T-BERD/MTS-8000 and T-BERD/MTS-6000 platforms equipped with the Optical Broadband Source (BBS) module deliver comprehensive fiber characterization including coarse wavelength division multiplexing (CWDM) and dense wavelength division multiplexing (DWDM) applications in a rugged, modular platform ideal for field use.

Today's fiber networks must meet exacting performance requirements to withstand the demands of widespread broadband access technology deployment. In addition to deploying fiber infrastructures that perform perfectly, network operators are challenged by the need to reduce operating expenses while adding new revenue-generating services, all within an environment that seems to grow more complex by the minute.

At the test level, the growing demand for 10 Gigabit Ethernet (GigE) and the emergence of 40G requires that more and more fiber links be fully characterized. With the T-BERD/MTS-8000 test platforms, JDSU has developed ideal, all-in-one solutions for these challenges. The T-BERD/MTS platforms combine small, highly integrated plug-in modules, battery operation, and rugged, drop-tested housing. Its weather-resistant design and long battery life are ideally suited for use in the field and its modularity allows for field upgrades to support new testing requirements. The T-BERD/MTS is easily upgradable with technologies and advanced options that support the changing needs of field technicians.

Applications

- DWDM and very-high-speed network characterization
- CWDM system testing
- Water peak qualification
- Component qualifications
- Metro, long-haul, and very-long-haul networks



T-BERD/MTS-6000

T-BERD/MTS-8000

Three Test Applications in One

The optical broadband source module qualifies DWDM components with physical layer testing including measurements for chromatic dispersion (CD) (using the referenced phase shift method), polarization mode dispersion (PMD) (using the fixed analyzer method), and attenuation profile (AP) that are required for verifying high-speed and full-band DWDM transmission. Having three test applications in a single product minimizes both capital expenses and the number of instruments technicians must carry into the field.

The easy-to-use T-BERD/MTS user interface gives field technicians:

- one module for multiple functions
- direct access to select one of three test functions.

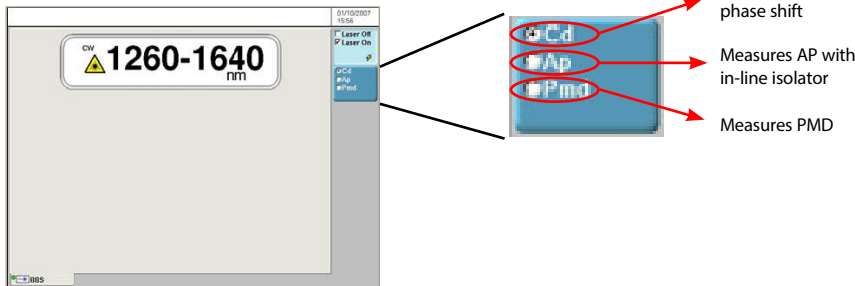


Figure 1. Source configuration

Field-Dedicated High-Performance Solution

Housed in a rugged T-BERD/MTS mainframe, the optical broadband source module offers the highest level of integration and ruggedness. Combined with the ODM plug-in module the complete solution is ready for any field measurement condition. Its size and weight are ideal for outside plant testing and its suite of personal computer interfaces and remote control capability are best fit for component testing.

- An all-in-one remote solution when combined with an OTDR
- Wide 1260 to 1640 nm wavelength range
- High dynamic range when combined with the ODM module (up to 45 dB)
- Fiber characterization and component testing capability

Specifications (Typical at 25°C)

Optical interfaces

Applicable fiber SMF 9/125 μm
Interchangeable optical connectors FC, SC, DIN, ST, LC

Wavelength range

E81BBS2A 1260 to 1640 nm

Minimum spectral density -40 dBm/0.1 nm
Output power >8 dBm
Laser safety Class 3B (FDA21CFR)

Physical

Weight 500 g (1.1 lb)
Dimensions (w x h x d) 213 x 124 x 32 mm (8.38 x 4.88 x 1.26 in)

Ordering Information

Broadband source

Part Number	Description
E81BBS2A	Broadband Source module for CD/PMD/AP (1260 to 1640 nm)

Universal optical connectors

EUNIPFC, EUNIPCSC, EUNIPCST, EUNIPCDIN, EUNIPCCL, EUNIAPFC, EUNIAPCSC, EUNIAPCST, EUNIAPCDIN, EUNIAPCLC

For more information on test adapters, cables, and fiber-optic couplers, refer to the separate data sheet "JDSU Fiber Optic Test Adapters and Cables."

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