

# Optical Broadband Source (BBS) Module

For T-BERD/MTS-6000A, -8000 Platforms

The VIAVI Solutions™ T-BERD/MTS-8000 and T-BERD/MTS-6000A 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, VIAVI 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.



## KEY FEATURES

- 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-6000A and T-BERD/MTS8000 platforms
- Tests high-performance components

## KEY APPLICATIONS

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

T-BERD/MTS-8000



T-BERD/MTS -6000A



## 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.

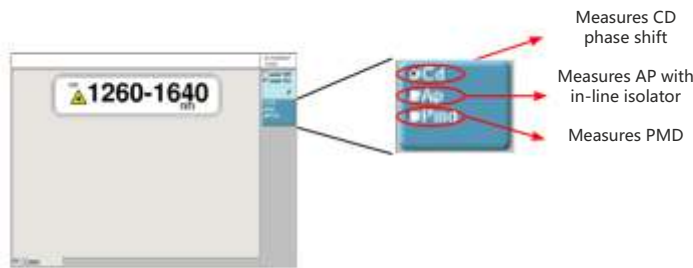


Figure 1. Source configuration

## Field-Dedicated HighPerformance 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 $\mu$ m
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	
Description	Part Number
Broadband Source module for CD/PMD/AP (1260 to 1640 nm)	E81BBS2A
Universal optical connectors	
EUNIPCFC, EUNIPCSC, EUNIPCST, EUNIPCDIN, EUNIPCLC, EUNIAPCFC, EUNIAPCSC, EUNIAPCST, EUNIAPCDIN, EUNIAPCLC	