



Brochure

## VIAVI T-BERD/MTS-8000 In-Service PMD (I-PMD™) Test Solution

VIAVI I-PMD test solution for the scalable T-BERD®/MTS-8000 V2 test platform is the industry's first solution that can troubleshoot faulty DWDM channels and qualify ROADM networks for future upgrades without taking down the entire network.

Based on the coherent-detection technique, the VIAVI I-PMD solution is your one-stop, single-ended tester for measuring PMD, analyzing DWDM channel spectrum (power level and frequency) and measuring in-band OSNR (I-OSNR).

The VIAVI I-PMD solution represents considerable savings in resources and OpEx with regard to network maintenance and service migration to 10, 40, or 100 G.

- Measure PMD anywhere in the network at any time, eliminating engineering planning, notifying customers in advance, night maintenance windows, and deploying technical crews
- A single-ended, single-tech, simultaneous-test solution will cut the number of technicians needed in half. It also reduces the number of instruments technicians need to carry by one third.
- Reduce time to identify and repair issues by isolating faulty channel(s) and getting a single snapshot of PMD, OSA, and I-OSNR.

### Key Features

- Measure polarization mode dispersion (PMD) on live traffic
- Analyze live transmission signals with built-in high-resolution OSA
- Test in-band OSNR (I-OSNR) in DWDM/ROADM networks

### Applications

- Upgrade high-speed networks up to 100 G
- Maintain and troubleshoot 10 G and 40 G transmission systems



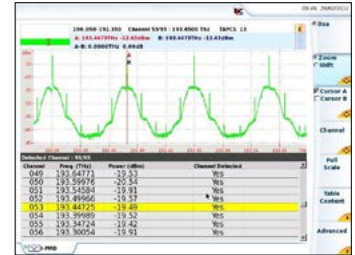
Smart and easy, the I-PMD test solution automatically identifies live channels and uses a measurement grid to perform PMD, channel power/frequency, and I-OSNR tests in a single scan.

Housed in the T-BERD/MTS-8000 V2, the I-PMD test solution is ideal for pre-qualifying high-speed networks before bit rate upgrades and identifying root causes for transmission failures when experiencing excessive bit error rate.

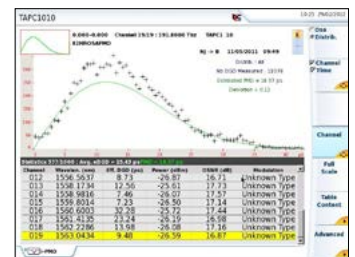
The instrument can monitor long-term signal variations and can be remotely controlled or accessed from anywhere in the network using an Ethernet, WiFi, or 3G connection.

### Additional Testing Capabilities

- Out-of-service PMD measurement when combined with a polarized broadband source at the far end
- Automated, in-service I-OSNR for any single polarization format from 2.5 to 40 G
- In-service I-OSNR measurement on 40 G PM-QPSK signals in ROADW DWDM networks
- Out-of-band OSNR measurement on 100 G pol-mux signals using the VIAVI ON/OFF method



Automated 10 G DWDM channel detection



Long-term PMD measurement results on multiple DWDM channels

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