Quick Card

T-BERD®/MTS-2000 Modular Test Set
E41PM Optical Power Meter

This procedure describes how to use the E41PM built-in Optical Power Meter to measure absolute power.

Equipment Requirements:

- T-BERD/MTS-2000 equipped with the following:
  - Fiber Optics Software Release V17.30 or greater
  - E41PM Optical Power Meter
- Fiber optic cleaning and inspection tools
- Launch Cable (patch cord) with connectors matching the Power Meter port and Fiber Under Test
- Optical Coupler to connect Launch Cable to Fiber Under Test

The following information is required to complete the test:

- Type of Fiber (Multimode or Single Mode)
- Type of Connectors (SC UPC, SC APC, LC UPC, etc.)
- Wavelength(s) to be tested (850nm, 1300nm, 1310nm, 1550nm, etc.)

Fiber Inspection Guidelines:

- Use the VIAVI P5000i or FiberChek Probe microscope to inspect both sides of every connection being used (Launch Cable, bulkhead connectors, patch cords, etc.)
- Focus the fiber on the screen. If dirty, clean the connector.
- If it appears clean, run inspection test.
- If it fails, clean the fiber and re-run inspection test. Repeat until it passes.
Connect to Fiber Under Test (FUT):
All fibers and connectors should be inspected and clean prior to connection, as described on page 1. The T-BERD 2000 may be connected directly to the FUT or via an optical patch panel (OPP) bulkhead as follows:

1. If the interface to the FUT is a patch cord:
   - Inspect the fiber end face of the patch cord.
   - Connect the patch cord to the built-in Power Meter port under the flap on top of the test set.

2. If the interface to the FUT is an Optical Patch Panel or coupler:
   - Inspect the FUT connected to the OPP.
   - Inspect the fiber end face of the Launch Cable.
   - Connect the Launch Cable to the built-in power meter port.
   - Inspect the other fiber end face of the Launch Cable.
   - Connect the Launch Cable to the OPP leading to the light source.
Operate the Power Meter:

1. Press the Power button to start the test set.

2. Press the Home button to display the Home view with the POWERMETER icon.

3. Tap the POWERMETER icon until it is yellow and highlighted. The Results view will be shown with Power Meter settings and results in the box labeled Powermeter on Base.

4. Tap the Wavelength soft key to select the desired Output Wavelength (850nm, 1300nm, 1310nm, 1550nm, etc.)

5. Tap the Unit soft key and set units to dBm.

6. View the Power Level in the Power Meter Results display in the center of the screen.