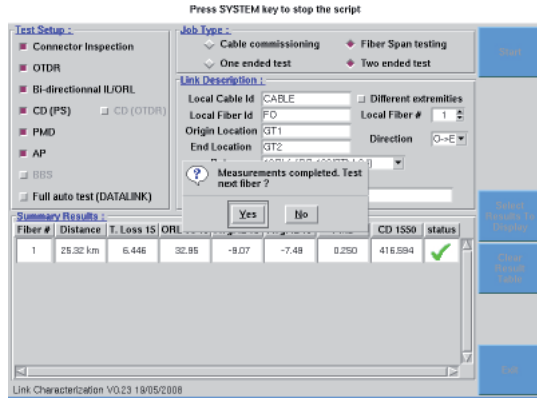


- Press to continue PMD test.
Upon completion of PMD test, instruct tech at far end to press AP mode of operation on light source.
- Press to continue AP test.
Upon completion of AP test, instruct tech at far end to press CD mode of operation on light source.
- Press to continue CD test.
After completion of CD test, Result screen appears.




If more fibers are to be tested press and fiber number automatically increments.
If no more fiber is to be tested press and a summary of the results is visible.

3 Press soft key to exit the link characterization script.

To see details of the tests, press RESULTS hard key and application soft key at the bottom of the on-screen.

10. LightSource Operation for Fiber Characterization Testing

- 1 Press the **Power** button  to turn on.
- 2 Using the **MODE** button to select BB⁽¹⁾.
- 3 When instructed by the technician performing the tests, using the **APPLICATION** button ensure PMD light is green.
- 4 Under **OUTPUT**, press the button to activate the source.
- 5 When directed by the testing technician, using the **APPLICATION** button ensure AP light is green, then CD.



OBS-550 has HD mode which is High dynamic mode. By selecting HD mode, the EDFA amplifier built into the light source is engaged and the output power increases substantially. In addition, the spectral range of the light source goes from 1460-1640 to 1530-1565 nm



8000 V2 PLATFORM QUICK CARD

FIBER CHARACTERIZATION SCRIPT GETTING STARTED

The following procedure describes how to configure a T-BERD/MTS 8000 V2 Platform with a MTAU 2-port module and how to start the Automated Fiber Characterization Script.

Please read the entire procedure BEFORE starting.

1. Inspect and clean connectors

Before connecting a fiber into a test module, inspect and clean the module bulkhead and the fiber jumper connectors.

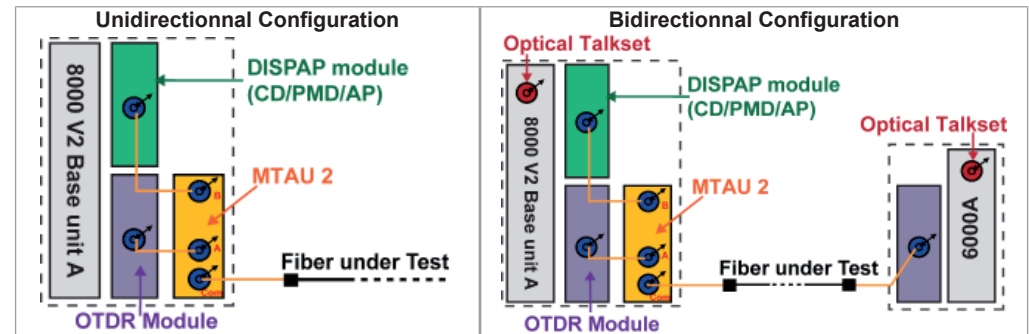


Use the P5000i video inspection scope to verify the connector quality.

Use appropriate cleaning material (e.g. IBC™ cleaner, cotton swab, dust air sprays, etc...) and re-inspect to confirm.

2. Connecting the test modules to the MTAU

- 1 Connect the OTDR module to the MTAU port A with a jumper.
- 2 Connect the DISPAP module to the MTAU port B with a jumper.







The test modules (OTDR, DISPAP) have to be located in the slots closest to the mainframe. Keep the MTAU module at the back slots.

3. Referencing the Test function

The Insertion Loss (IL), the Optical return Loss (ORL), the Chromatic Dispersion (CD) and the Attenuation Profile (AP) measurements have to be referenced before starting testing


Please refer to dedicated quick cards for the associated procedures

4. Getting started with the “Link Characterization” Script

- 1 Press the  hard key.
- 2 Drop down using the navigation keys  or touch  to select the “Link characterization” script.
- 3 Press the softkey  to launch the script process.

5. Define the Test Setup

The available test functions are listed in black in **Test Setup** window

- 1 Check marked the square button for each test function to be added in the test sequence.
- Connector Inspection**: Available if video inspection scope is connected to the mainframe. The script will open up the connector image viewer.
 - OTDR**: The script will use the wavelengths defined in the OTDR test Setup and measurements will be performed using Automatic configuration.
 - Bi-dir. OTDR**: Automated bi-directional OTDR measurement using the  . It will require the use of the optical talk set and will select **Full auto test (DATALINK)** automatically.
 - Bi-directional IL/ORL**: Automated bi-directional Loss test set, using the FiberComplete function of the OTDR module.
 - CD (PS)**: Chromatic Dispersion measurement. It requires the use of the OBS handheld or the selection of the **BBS** on the other T-BERD/MTS 8000 V2 script configuration menu.
 - PMD**: PMD measurement. It requires the use of the OBS handheld or the selection of the **BBS** on the other T-BERD/MTS 8000 V2 script configuration menu.
 - AP**: Attenuation Profile measurement. It requires the use of the OBS handheld or the selection of the **BBS** on the other T-BERD/MTS 8000 V2 script configuration menu.
 - Full auto test (DATALINK)**: It enables communication between 2 T-BERD/MTS 8000 V2 running the script in order to perform bi-directional OTDR measurement and automate the BBS mode selection.

6. Define the Job Type

The **Job Type** enables to define how the product is going to organize the results and what type of characterization test sequence is performed.


- 1 Check marked the square button for each type.
- Cable commissioning**: is used for testing an entire cable. The script will save all the test results and the summary report into one directory, and for all the fibers. The directory will be created using the Cable ID as the name. This directory will be located under the current selected directory. Make sure the selected directory is the root hard disk or a well known one. Press the **SYSTEM** hard key and the **FILE** hard key to get access to the Explorer in order to change the directory selection.

- Fiber Span testing**: is used for few fiber testing. The script will save the test results of one fiber and the report summary into one directory. Each fiber will have its own directory. The directory will be created using the FiberID and the Fiber #, as the name. This directory will be located under the current selected directory.
- Bi-directional Testing**: defines the script sequence and synchronization between the 2x T-BERD/MTS 8000 V2. It is required when **Bi-dir. OTDR** and/or **Bi-directional IL/ORL** test parameters are selected.
- Uni-directional Testing**: defines the script sequence when only one T-BERD/MTS 8000 V2 is used in conjunction with a handheld OBS 5x0 at the far end.

7. Define the Link Description




The **Link Description** enables to document the information, related to the link being tested.

- 1 Fill-in all the information using the USB key board: Local Cable Id / Local Fiber Id / Origin & End Location / Job Ticket
- Rate**: select the expected bit rate in the drop down menu. This will pre-define the alarm thresholds for CD and PMD testing.
 - Add a **Comment** which will be loaded into each test application and save with each test results.
 - Define the **Local Fiber #** of your fiber under test.
 - Set the **Direction** of the measurement between O->E and E->O (Origin and End).

If the Origin fiber number or cable Id is different from the far end, check mark **Different extremities** in order to have access to the local and distant information using the  soft key.



8. Configuring the “Results” Summary table

This summary table enables to review selected values at the end of the test sequence. A pass/Fail status is associated to the table.

- 1 Press the  to access the selection list.
- 2 Highlight one parameter in the column **Available results**.
- 3 Press the soft key  to select the parameter and see it in the column **Results to display**
- 4 Repeat steps 1 to 3 until you have selected all the parameters. Maximum 7.
- 5 Press the soft key  in order to acknowledge the selection.

9. Start the test sequence

When the script configuration is done, you can start the test sequence.

- 1 Press the  soft key when ready.
- 2 Follow the step by step guidances to conduct the link characterization sequence.
 - Press  to Start a SM-OTDR test. (This will start a 1310/1550/1625 nm OTDR test).
 - When asked to “CHECK PMD SOURCE”, contact far end of fiber under test and connect OBS-550/500 light source. Turn light source on, ensure BB mode of operation, PMD mode and press activate. Red light will come on indicating light source is active.