VIAVI Solutions

Quick Card

T-BERD®/MTS-5800 Network Tester

Ethernet AOC/DAC Breakout Cable Testing

This quick card describes how to test 40G QSFP+ to 4 x SFP+ Active Optical Cables (AOC) and Direct Attached Copper (DAC) Breakout Cables using the T-BERD/MTS 5800.

Equipment Requirements:

- T-BERD/MTS 5800-100G equipped with the following:
  - BERT software release V27.2 or greater
  - Options:
    - C510GELAN for 10GigE
    - C540GE for 40GigE
    - C5DUAL10G or C5THRU-LB

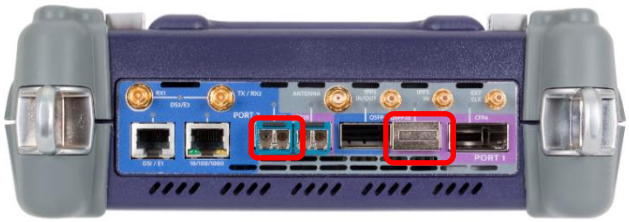


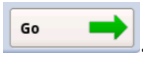
Figure 1: T-BERD 5800-100G

Connect Cable Under Test:

- Insert the QSFP+ into the **Port 1** QSFP+/QSFP28 on the top of the T-BERD/MTS 5800=100G.
- Insert the first SFP+ into the **Port 2** SFP+/SFP28 slot on the top of the T-BERD/MTS 5800-100G

Figure 2: AOC Breakout Cable

Launch Test:

1. Press the Power button  to turn on the test set.
2. Using the **Select Test** menu, **Quick Launch** menu, or **Job Manager**, launch an **Ethernet 10GigE LAN, P2 Cable Test.**
3. Select **Start a New Configuration (reset to defaults)** by tapping  .

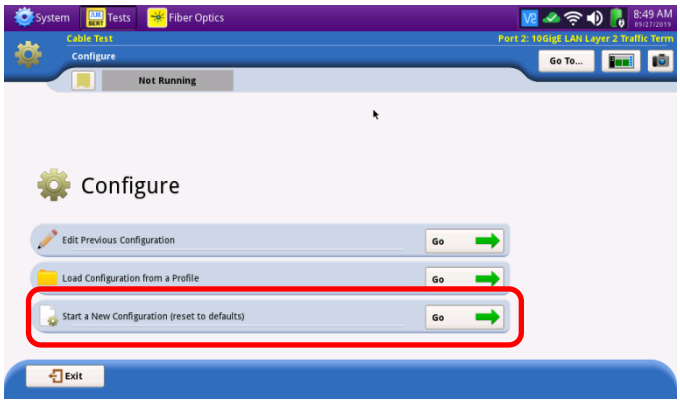


Figure 3: P2 Cable Test Startup Screen

Configure Test:

1. Set **Cable Type** to **Breakout.**
2. Choose the **Test Duration**. **Recommended** is the suggested setting. Duration will be calculated based on the line rate and **BER Threshold**.
3. Select the **BER Threshold**. Lower values increase the **Recommended** test duration.
4. Tap **Launch Other Port**. Wait until Other Port Running is displayed.
5. Check the **Stop on Error** box if you don't want the test to continue in case of failure.
6. Tap Next to proceed to the **Report Information** screen.

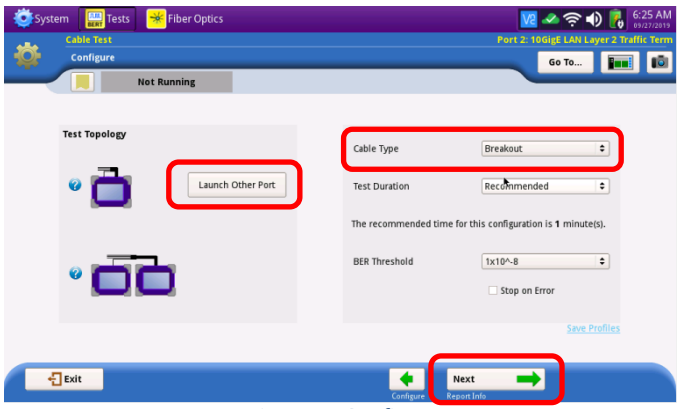


Figure 4: Configure

Report Information:

1. If you wish to save a report, you can enter the **Customer Name, Technician ID, Test Location, Work Order,** and **Comments/Notes.**
2. Tap Next to proceed to the **Run Test** screen.

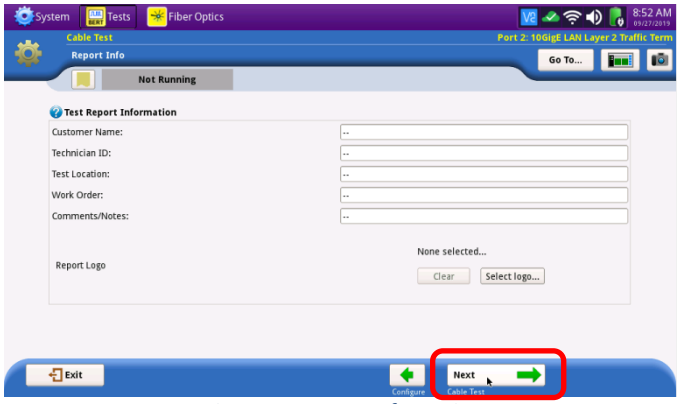


Figure 5: Report Information

Cable Test:

1. Enter the **Label** (typically 1, 2, 3, or 4) for the SFP+ you are testing
2. Tap **Test SFP Cable** to start the test.
3. At the end of the test, view the **Result Overview** tab and verify all tests pass.
4. If you are testing an AOC, select the **Optical Power (dBm)** tab to view the Rx and Tx Levels.
5. Insert the next SFP+ into the Port 2 SFP+/SFP28 slot on the top of the T-BERD/MTS 5800-100G.
6. Repeat steps 2 thorugh 5 until all SFP+ breakouts are tested.
7. Tap Next to proceed to the **Report** screen.

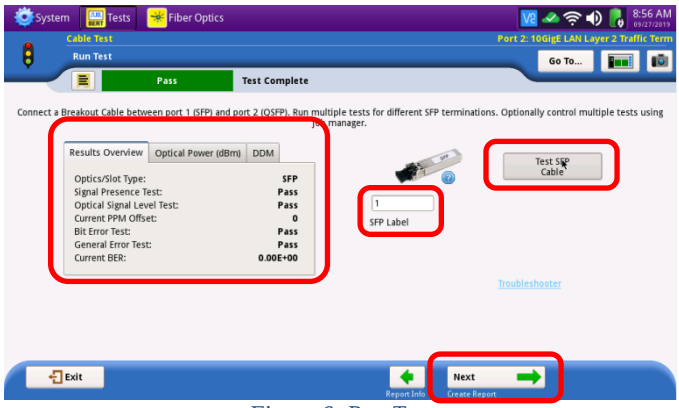


Figure 6: Run Test

Create Report:

1. Tap 

to generate a test report in .pdf format
2. After viewing the report, tap 

twice to exit the **Cable Test** workflow.

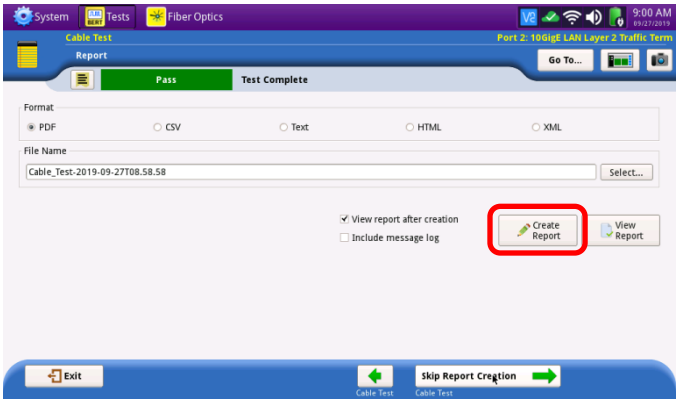


Figure 7: Create Report