

# Quick Card

# T-BERD<sup>®</sup>/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:
  - o BERT software release V27.2 or greater
  - Options:
    - C510GELAN for 10GigE
    - C540GE for 40GigE
    - C5DUAL10G or C5THRU-LB

## 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 1: T-BERD 5800-100G



Figure 2: AOC Breakout Cable

#### Launch Test:

- 1. Press the Power button to turn on the test set.
- 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

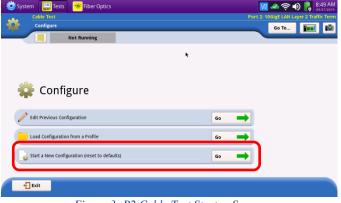
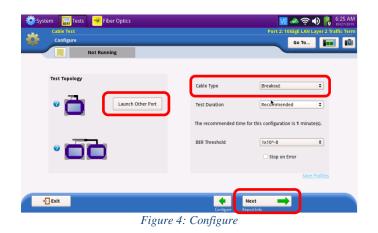


Figure 3: P2 Cable Test Startup Screen



# **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.
- 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.



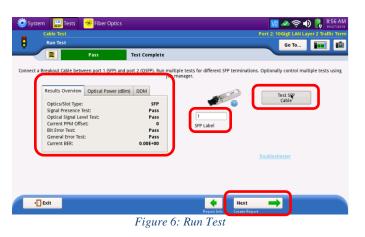
**Report Information:** 

- 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.

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Report Info Not Running	Go To <b>Emi</b>
<b>W</b> Test Report Information	
Customer Name:	••
Technician ID:	••
Test Location:	•
Work Order:	•
Comments/Notes:	••
Report Logo	None selected Clear Select logo
T Exit	♦ Next →
	Configure Cable Test

#### 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.





# **Create Report:**

- Tap Create Report to generate a test report in .pdf format
- 2. After viewing the report, tap twice to exit the **Cable Test** workflow.

System	Tests 😽 Fiber Optics			9:00 9:07/ Port 2: 10GigE LAN Layer 2 Traffic T
Report				Go To
	Pass	Test Complete		
Format				
PDF	⊖ CSV	$\bigcirc$ Text	⊖ HTML	⊖ XML
File Name				
Cable_Test-2019-0	9-27108.58.58			Select
			✓ View report after creation Include message log	Create Report View Report

Figure 7: Create Report