

QUICK CARD

Ethernet Y.1564 Layer 2 Multiple Streams

This document shows how to configure and run a Y.1564 Layer 2 Multiple Stream test for Metro Ethernet Service Activation.

EQUIPMENT REQUIREMENTS

- T-BERD/MTS 5800 equipped with the following:
 - BERT software release V26.0 or greater
 - Test options:
 - C510M1GE for 10 Megabit to 1 Gigabit Ethernet
 - C510GELAN for 10 Gigabit Ethernet
 - C525GELAN for 25 Gigabit Ethernet
 - C540GELAN for 40 Gigabit Ethernet
 - C5100GELAN for 100 Gigabit Ethernet
 - C5COS for multiple stream traffic generation
- SFP or QSFP optical transceiver to match the line under test
- CAT 5E or fiber optic jumper cables to match the line under test
- Fiber optic inspection microscope (VIAVI P5000i or FiberChek Probe)
- Fiber optic cleaning supplies



Figure 1: Equipment Requirements

FIBER INSPECTION GUIDELINES

- Use the VIAVI P5000i or FiberChek Probe microscope to inspect both sides of every connection being used (OCC Port, Launch Cable, bulkhead connectors, patch cables, etc.)
- Focus fiber on the screen. If dirty, clean the end-face.
- If it appears clean, run inspection test.
- If it fails, clean the fiber and re-run inspection test. Repeat until it passes.



Figure 2: Inspect Before You Connect

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CONNECT TO FIBER UNDER TEST

- For copper 10/100/1000BASE-T interface testing with the T-BERD/MTS 5800v2, connect the Port 1 10/100/1000 RJ-45 jack to the port under test using CAT 5E or better cable.
- For copper 10/100/1000BASE-T interface testing with the T-BERD/MTS 5800-100G, insert a copper SFP into the Port 1 SFP+/SFP28 slot and connect to the port under test using CAT 5E or better cable.
- For optical interfaces:
 - Insert desired SFP, QSFP, or CFP4 into the Port 1 slot on the top of T-BERD.
 - Inspect and, if necessary, clean all SFPs, fibers, and bulkheads, as described on page 1.
 - Connect the SFP or QSFP to the port under test using a Single Mode or Multimode jumper cable compatible with the interface under test.

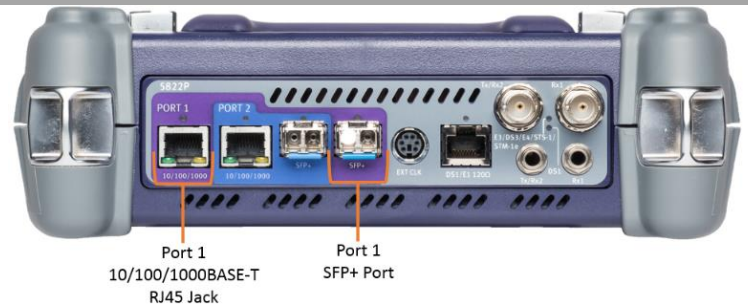


Figure 3: T-BERD 5800v2

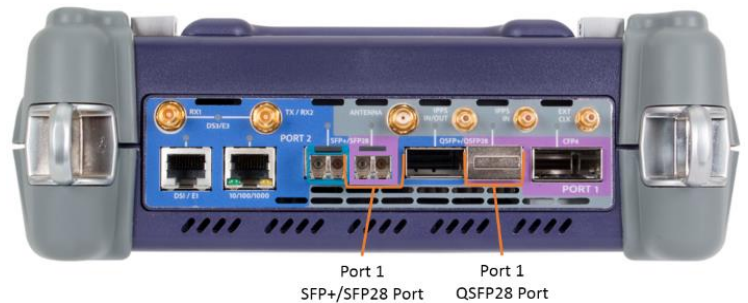

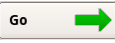


Figure 4: T-BERD 5800-100G

LAUNCH TEST

- Press the Power button  to turn on the test set.
- Using the **Select Test** menu, **Quick Launch** menu, or **Job Manager**, launch an **Ethernet**, **Y.1564 SAMComplete**, **L2 Multiple Streams**, **Terminate** test on port 1 for the desired physical interface. For example: Ethernet ► 10/100/1000 ► Y.1564 SAMComplete ► L2 Multiple Streams ► P1 Terminate.
- Tap the  button next to “**Start a New Configuration (reset to defaults)**”

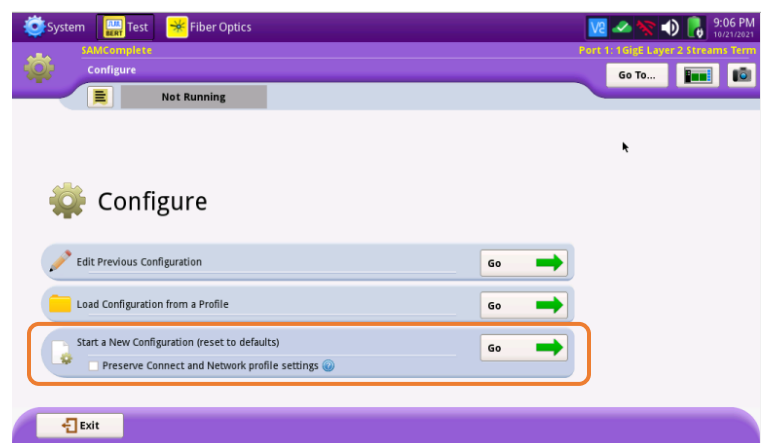



Figure 5: Start a New Configuration

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CONFIGURE TEST

1. Tap the  button 3 times to display the **Network Services** screen. Set **Number of Services** to the number of streams you wish to test.

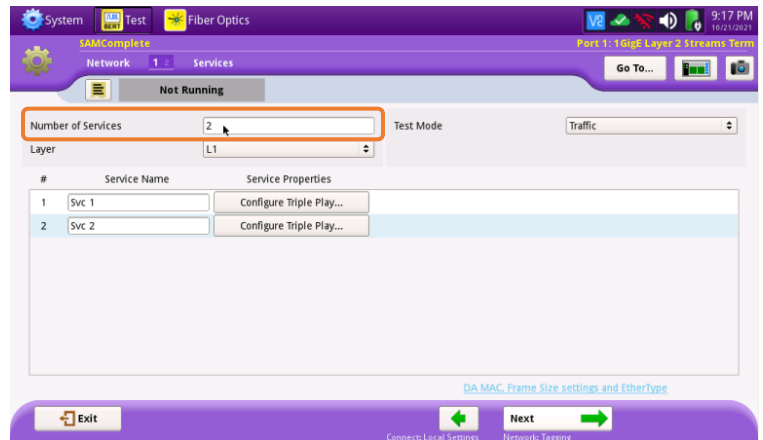
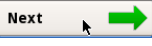


Figure 6: Configure Network Services settings

2. Tap the  button to display the **Network Tagging** screen. Configure Encapsulation and VLAN settings to match the line under test.

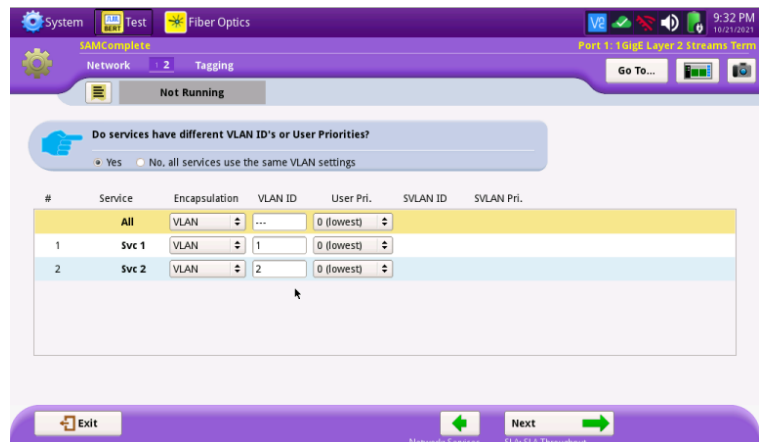



Figure 7: Configure Network Tagging

3. Tap the  button to display the **SLA Throughput** screen. Set **CIR** and **EIR** to the desired traffic loads for each service. If the service is policed, check the **Policing** boxes for each service. Otherwise, uncheck the **Policing** boxes.

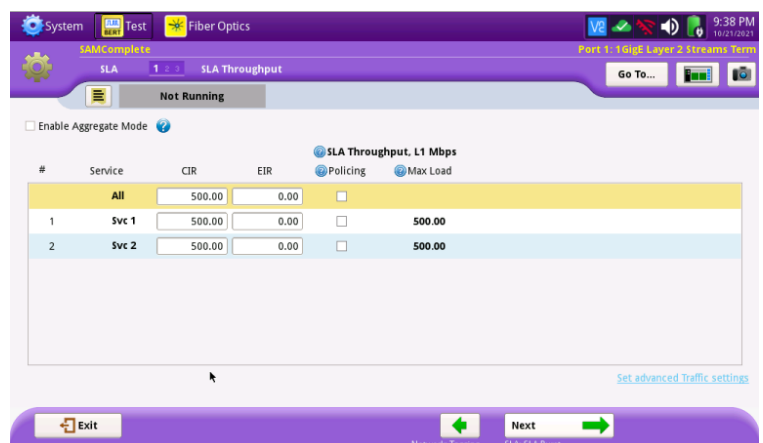
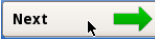


Figure 8: Configure SLA Throughput settings

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4. Tap the  button to display the **SLA Burst** screen. Tap **Yes** after the **Would you like to perform burst testing?** Prompt and enter the CBS for each service.

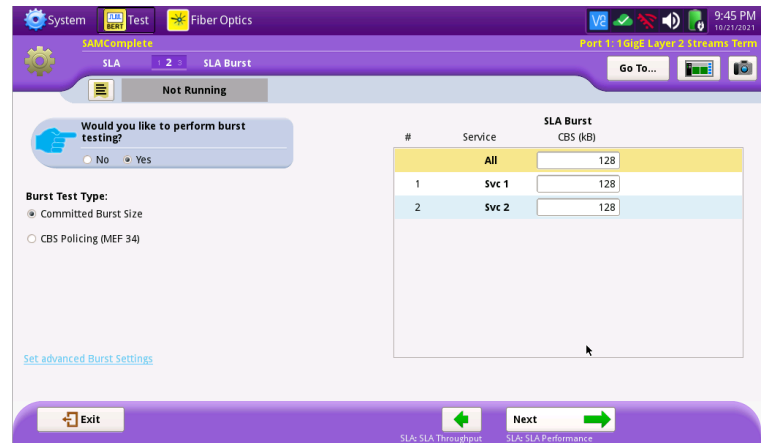



Figure 9: Configure SLA Burst settings

5. Tap the  button to display the **SLA Performance** screen. Check all boxes for which a Pass/Fail Threshold is known. Enter the Threshold for each selection.

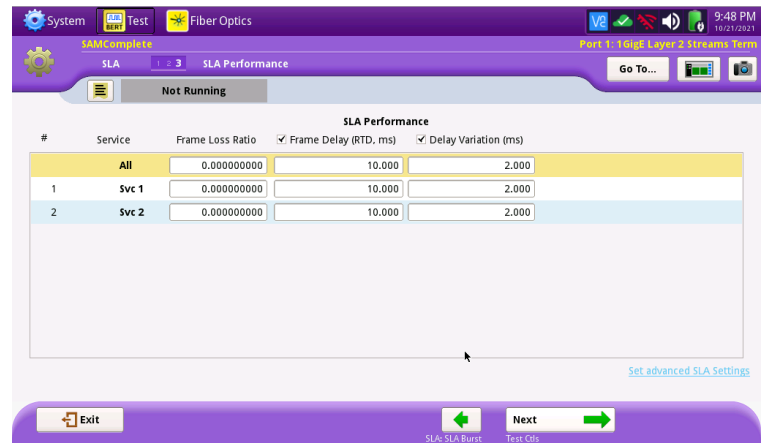
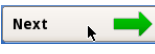

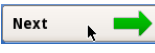



Figure 10: Configure SLA Performance settings

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RUN TEST

1. Tap the  button 5 times to display the **J-QuickCheck** screen. Tap the  button. Verify that the **Remote Loop** is recognized.

2. Tap the  button to display the **Run Y.1564 Tests** screen. Tap the  button. Wait for the test to complete and verify that all tests pass with green or blue checkmarks.

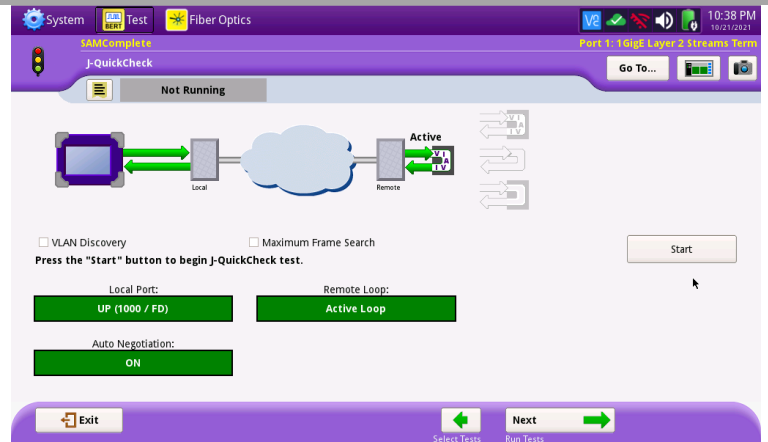


Figure 11: J-QuickCheck

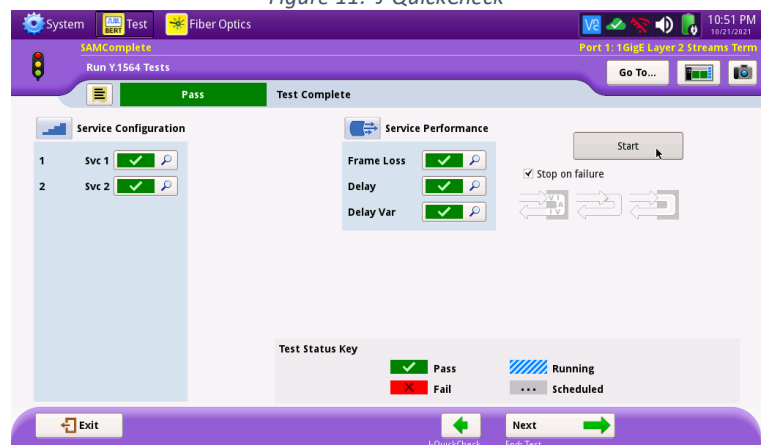
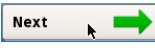




Figure 12: Run Y.1564 Test

SAVE REPORT

1. Tap the  button three times to display the **Report** screen. Tap .
2. Tap the  button three times to close the report and exit the Y.1564 test.

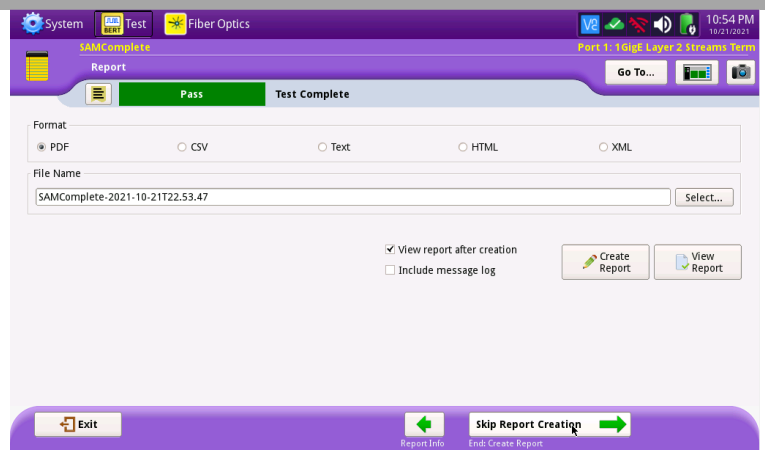


Figure 13: Create Report