QUICK CARD

Ethernet Y.1564 Layer 2 Multiple Streams

This quick card describes how to configure and run an Y.1564 Layer 2 Multiple Streams Test for Metro Ethernet service activation using the OneAdvisor 1000 100G Module.

**LAUNCH TEST**

1. Press the Power button to turn on the OneAdvisor.
2. Press the 100G Module Test icon at the top of the screen.
3. Tap the Power button and click to launch the 100G Module.
4. Using the Select Test menu, Quick Launch menu, or Job Manager, launch the Ethernet Y.1564 Layer 2 Traffic test on Port 1 for the desired rate. For Example: Ethernet ► 1GigE Optical ► Y.1564 SAMComplete ► L2 Multiple Streams ► P1 Terminate.
5. Tap the button next to “Start a New Configuration (reset to defaults)”

---

**Figure 1: Equipment Requirements**

- OneAdvisor 1000 equipped with the following:
  - 100G Transport Module
  - BERT software release V30.1.0 or greater
  - C510GELAN test option for 10 Gigabit Ethernet
  - C525GE test option for 25 Gigabit Ethernet
  - C540GE test option for 40 Gigabit Ethernet
  - C550GE test option for 50 Gigabit Ethernet
  - C5100GE test option for 100 Gigabit Ethernet
- Optical Transceiver supporting the interface to be tested (SFP or QSFP)
- Cables to match the optical transceiver and the line under test
- Fiber optic inspection microscope (P5000i or FiberChek Probe)
- Fiber optic cleaning supplies

**Figure 2: Launch Screen**

**Figure 3: Y.1564 test**
The following Information is needed to configure the test:

- Number of Streams to generate
- VLAN ID, if VLAN tagging is used
- Frame Size for each stream
- Committed Information Rate (CIR) for each stream
- Pass/Fail Threshold for Frame Loss Ratio, Delay and Delay Variation (Jitter)

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

2. If you want different Frame Sizes, Destination MAC Addresses, or Ethertypes for each stream, tap **DA MAC, Frame Size setting and Ethertype**, enter desired values, and tap **Back**.

3. Tap **Next** to display the Network Tagging screen.
   - If you are testing a single VLAN, set **Encapsulation** to VLAN and enter the VLAN ID.
   - If you are testing multiple VLANs, tap the **Yes** radio button and enter the VLAN IDs and Priorities.
4. Tap the Next button to display the SLA Throughput screen.
   ► Enter the CIR allocated to each stream of traffic or service.
   ► Under EIR, enter the additional bandwidth available when only one stream of traffic is being generated.
   ► If the streams are not policed individually, uncheck all Policing checkboxes.

5. Tap the Next button twice to display the SLA Performance screen.
   ► Enter the Frame Loss Ratio, Frame Delay, and Delay Variation pass/fail criteria for all services.

6. Tap the Next button 5 times to display the J-QuickCheck screen.
For Optical Interfaces:
1. Use the VIAVI P5000i or FiberChek Probe microscope to inspect both sides of every connection being used (SFP, attenuators, patch cables, bulkheads)
   - Focus the fiber on the screen.
   - If it appears dirty, clean the fiber end-face and re-inspect.
   - If it appears clean, run the inspection test.
   - If it fails, clean the fiber and re-run inspection test. Repeat until it passes.
2. Insert desired Optical Transceiver into the Port 1 SFP or QSFP slot on the top of the T-BERD.
3. If necessary, insert optical attenuators into the SFP TX and/or RX ports.
4. Connect the SFP to the port under test using a jumper cable compatible with the line under test.

For Copper 10/100/1000BASE-T interfaces:
Connect the 10/100/1000 RJ-45 jack to the port under test using CAT 5E or better cable.

1. Verify that Local Port status UP and Full Duplex (FD)
2. Tap the button.
3. Verify that the Remote Loop is recognized.
4. Tap the button to display the Run Y.1564 Tests screen.
**QUICK CARD**

**RUN TEST**

1. Tap the **Start** button.

2. Wait for the test to complete and verify that all tests pass or complete as indicated by a green checkmark.

![Figure 14: Run Y.1564 Tests](image)

**CREATE REPORT**

1. Tap the **Next** button three times to display the **Report** screen.

2. Tap **Create Report**.

3. Tap **Exit** buttons three times to close the report and exit the Y.1564 test.

![Figure 15: Create Report](image)

![Figure 16: Exit](image)