**Ethernet RFC 6349 TrueSpeed Test - Remote Unit**

RFC-6349 specifies a methodology for measuring end-to-end TCP throughput between a local (near-end) TCP Client and a remote (far-end) TCP Server. This Quick Card describes how configure the T-BERD 5800 as the remote TCP Server.

### Equipment Requirements

- T-BERD/MTS 5800 equipped with the following:
  - BERT software release V30.1.0 or greater
  - C510M1GE test option for 10 Megabit to 1 Gigabit Ethernet
  - C510GELAN test option for 10 Gigabit Ethernet
  - C5100GE test option for 100 Gigabit Ethernet
  - C5LSLAYER4 test option for 1 Gigabit Truespeed
  - C510GLAYER4 test option for 10 Gigabit Truespeed
  - C5100GLAYER4 test option for 100 Gigabit Truespeed
- Optical Transceiver supporting the line rate to be tested
- Cables to match the optical transceiver and the line under test
- Fiber optic inspection microscope (P5000i or FiberChek Probe)
- Fiber optic cleaning supplies

### Connect to Line Under Test

**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). Clean and 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. 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, RFC 6349 TrueSpeed, Terminate test on Port 1 for the desired physical interface. For example:

   Ethernet ► 10/100/1000 ► RFC 6349 TrueSpeed ► IPv4 ► P1 Terminate

3. Tap the button next to “Start a new configuration (reset to defaults)” option.

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**Figure 3: Launch Test**

**Figure 4: Configure**
1. Select “I am installing or turning-up a new circuit” and tap the Next button to advance to the Symmetry screen.

2. Select My downstream and upstream throughputs are the same option and tap the Next button to advance to the Connect to Remote Instrument screen.

3. Use the Local Settings configuration section to fill in this T-BERD’s IP address, Subnet Mask and Default Gateway. If VLAN tagging is used, set the Encapsulation option to VLAN and provide the appropriate VLAN ID. Leave the Remote Settings section set to defaults.
5. Tap the button, ensure that the option is not checked and tap the button again.

5. Check the Sync Acquired and Link Active LEDs to ensure the unit is connected to the network under test. The remote (far-end) T-BERD unit is now ready for RFC 6349 TrueSpeed test to be executed from a local (near-end) T-BERD unit.