

## QUICK CARD

### FiberComplete PRO Loopback Referencing

This quick card describes how to perform a **Loopback Reference** on a T-BERD/MTS 4000 V2 and FiberComplete OTDR module, prior to running **FiberComplete PRO** applications for Bi-Directional Fiber Testing. Referencing is recommended at the start of each day of testing and whenever launch cables are changed. If the launch cable and FiberComplete OTDR port are in pristine conditions, are clean, and have passed inspection, a new reference is not required.

- ▶ T-BERD/MTS 4000 V2 equipped with the following:
  - Fiber Optics Software Release V23.1.2 or greater
  - FiberComplete OTDR Module (model E4126B-FCOMP, E4136B-FCOMP, or E4138FB65-FCOMP)
  - FiberComplete Termination Kit, including optical couplers and non-reflecting terminations
- ▶ Fiber optic cleaning and inspection tools
- ▶ Launch Cable (Minimum 20-meter Fiber optic patch cable with connectors matching the OTDR port and Fiber Under Test)



Figure 1: Equipment Requirements

- ▶ Use the VIAVI P5000i or FiberChek Probe microscope to inspect both sides of every connection being used (OTDR 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 LAUNCH CABLE TO OTDR

All fibers and connectors must be inspected and clean prior to connection, as described on page 1.

1. Inspect the FiberComplete OTDR port on top of the T-BERD/MTS, using appropriate inspection tip:
  - ▶ FBPT-SC tip for SC-PC ports
  - ▶ FBPT-SC-APC tip for SC-APC ports
  - ▶ FBPT-LC tip for LC ports
2. Inspect the fiber end face of the Launch Cable.
3. Connect the Launch Cable to the OTDR port.



Figure 3: OTDR Port Inspection

### LAUNCH FIBERCOMPLETE

1. Press the Power button to start the test platform.
2. Tap the Home icon on the right of the screen.
3. Tap the **FCOMP**, **FCOMP-PRO**, or **FiberComplete** icon to launch FiberComplete:

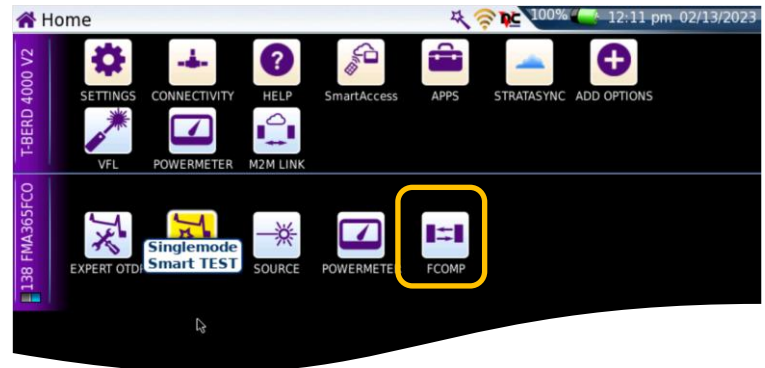
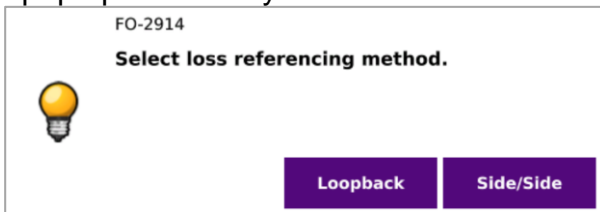


Figure 4: Launch FiberComplete

4. The T-BERD/MTS platform will launch FiberComplete.

### PERFORM LOOPBACK REFERENCE

1. Tap the **References** soft key to display current reference values.
2. Tap the **START REF** soft key.
3. A pop up will allow you select a method:



4. Select **Loopback** to perform a loopback reference.



Figure 5: FiberComplete Results Screen

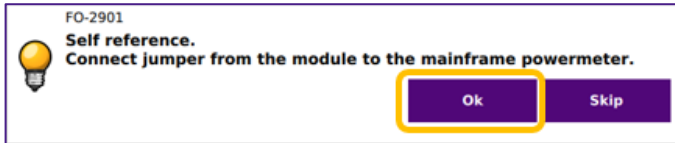


Figure 6: START REF

## QUICK CARD

### PERFORM LOOPBACK REFERENCE (CONTINUED)

- A pop up will prompt you to connect to the mainframe power meter:

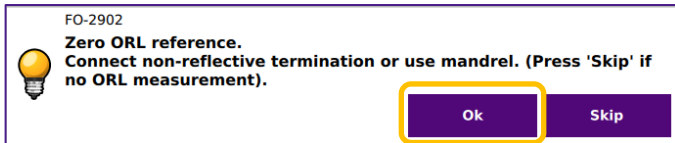


- Connect the Launch Cable to the Power Meter port on the T-BERD/MTS platform as shown in *Figure 7*.



Figure 7: Self Reference Connection

- Tap **OK** to perform the reference.
- A pop up will prompt you to connect a non-reflective termination:



- Disconnect the launch cable from the mainframe Power Meter port.
- Connect an optical coupler and non-reflective termination to your launch cable according to your connector type. An SC/UPC coupler and termination is displayed in *Figure 8*.



Figure 8: Zero ORL Reference Connection

- Tap **OK** to perform the reference.
- Once complete, the T-BERD/MTS platform will display the Reference values.
- Disconnect the launch cable from the non-reflective termination, but leave the launch cable connected to the FiberComplete OTDR port.
- Tap the **References** soft key to exit the Reference screen. You are now ready to setup and perform bidirectional measurement using the FiberComplete application.

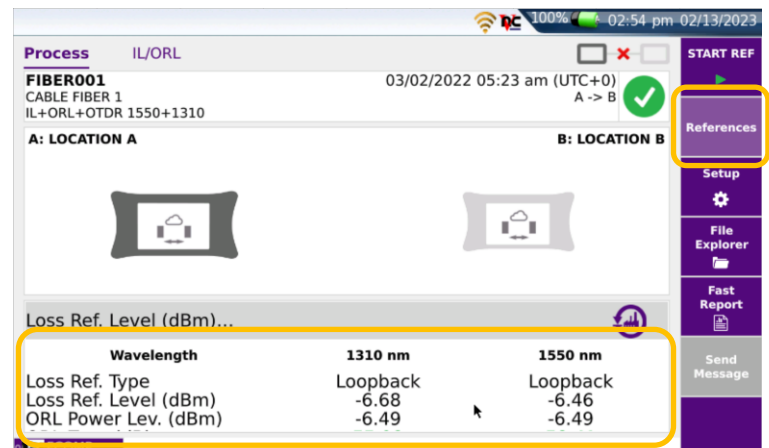


Figure 9: Reference values