Quick Card

FiberChek™ Probe Microscope
Fiber Inspection with FiberChekPRO™

The following procedure outlines how to use the FiberChek Probe Fiber Microscope with VIAVI FiberChekPRO software to inspect a simplex fiber end face.

Equipment Requirements:
- FiberChek Probe Fiber Inspection Microscope
- Personal Computer (PC) or Laptop
- FiberChekPRO software with 2.0 version or greater (download at http://fcpro.updatemyunit.net/)
- Bulkhead and Patch Cord Tips matching the fiber under test
- Fiber optic cleaning tools

The following information is required to complete the test:
- Type of Fiber (Multimode or Single Mode)
- Type of Connectors (SC UPC, SC APC, LC UPC, etc.)
- Type of Inspection Tips (See Figure 1):
  - Standard Patch Cord Tip (FBPT-U12M, FBPT-U25M, FBPT-U25MA, etc.)
  - Standard Bulkhead tip (FBPT-SC, FBPT-SC-APC, FBPT-LC, etc.)
  - Long Reach Bulkhead tip (FBPT-LC-L, FBPT-SC-L, etc.)
  - Angled Bulkhead Tip (FBPT-LC-A6S, FBPT-SC-A6, etc.)

INSPECTION TIP	APPLICATION
FBPT-SC	
FBPT-U25M	
FBPT-SC-APC	
FBPT-U25MA	
FBPT-LC	
FBPT-U12M	

Figure 1: Common "Standard" Inspection Tips

Figure 2: FiberChek Probe Microscope

Set up the FiberChek Probe Microscope:

1.   Press the **Power Button** to turn on the FiberChek Probe.

2. Connect the FiberChek Probe to the PC/laptop via USB, or enable a **Wi-Fi** connection as follows:

   - Tap the **Touchscreen Display** to enter the **Settings** menu.
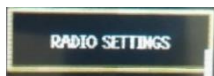
     Use the **Navigation control** or touch the arrows on the screen to highlight **Radio Settings** and press the **Action Button**.

   -   Use the **Navigation control** button or touch the arrows to highlight **Wi-Fi Enable** and press the **Action button**.

3. Press the **Return button** or press the **Trigger** to return to the Live Inspection screen. A Wi-Fi icon will appear at the top of the screen.

4. Connect the FiberChek Probe microscope to a PC or Laptop via **Wi-Fi**.

   - Enable Wi-Fi on the Laptop or PC.
   - Look for the FiberChek Wi-Fi SSID and select **Connect.**
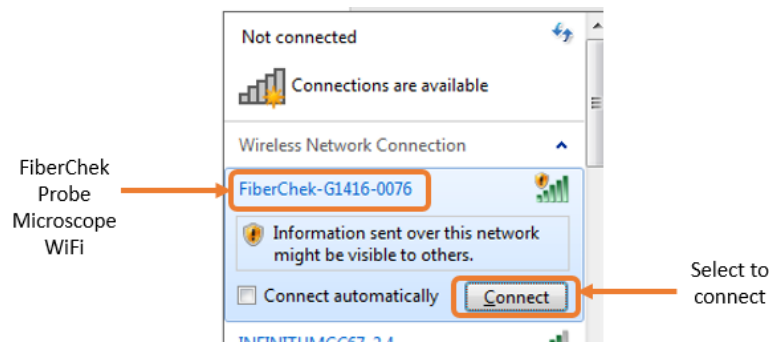

Figure 3: Wi-Fi networks

5. Connect the appropriate patch cord or bulkhead **Inspection Tip** to the FiberChek Fiber Inspection Microscope by loosening and tightening the **Retaining Nut** on the FiberChek Probe barrel assembly. Note: Some tips connect directly to the probe, without a barrel assembly. Consult the *VIAVI Tips & Adapters Selection Guide* for more information.

Set up FiberChekPRO Software:

1. **⊘ FiberChek PRO** Press the **FiberCheckPRO** icon from the Windows® Start menu on your PC or laptop to launch FiberChekPRO.

2. Tap the **Tip** and **Profile** icons and select the options that match the fiber under test:

   TIP

   Tips:
   - **Standard Tips (with BAP1)** for Standard Patch Cord Inspection Tips (i.e. FBPT-U12M, FBPT-U25M, FBPT-U25MA) and Standard Bulkhead Inspection Tips (i.e. FBPT-LC, FBPT-SC, FBPT-SC-APC)
   - **Simplex Long Reach (-L) Tips** for Long Reach Inspection Tips (i.e. FBPT-LC-L, FBPT-SC-L)

   PROFILE

   Profiles:
   - **SM UPC (IEC-61300-3-35 Ed. 2.0)** for Single Mode Fiber Ultra Polished Connectors
   - **SM APC (IEC-61300-3-35 Ed. 2.0)** for Single Mode Fiber Angled Polished Connectors
   - **SM PC & Fiber Stub (IEC-61300-3-35 Ed. 2.0)** for Single Mode Fiber Polished Connector
   - **MM (IEC-61300-3-35 Ed. 2.0)** for Multimode Fiber

Run Pass/Fail Analysis:

1. Insert the **Bulkhead Inspection Tip** into the bulkhead or insert the Patch Cord ferrule into the **Patch Cord Inspection tip** on the FiberChek Probe.

2. Press the **Trigger** of the FiberChek microscope to auto-focus the fiber under test. The left horizontal bar on the screen indicates the level of focus adjustment. The higher the level, the better the focus. The red line indicates optimal focus for that fiber. Focus the image until the focus bar is as close to the line as possible.
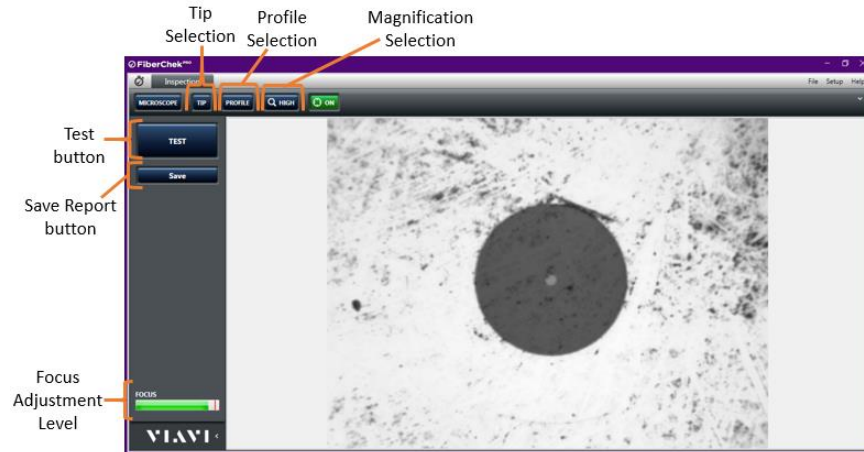

Figure 4: Live Inspection View

3. There are 3 ways to run the fiber inspection test:

   - Press and hold the Trigger on the FiberChek Probe for 2 seconds.
   - Press the Action button on the FiberChek Probe.
   - Press the **TEST** option on the screen.

4. **FAIL** ⊗ If the test **fails,** clean the fiber end face and **repeat steps 1 through 3.**

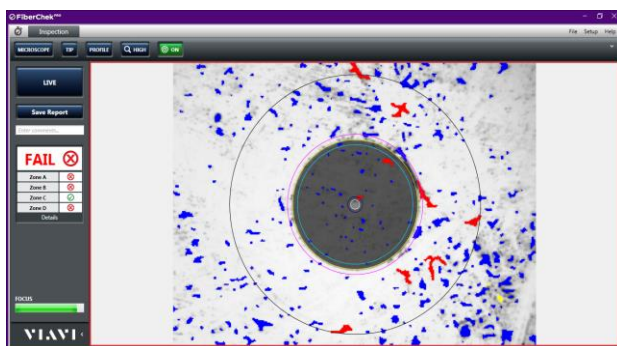5. **PASS** ⊘ If the **test passes**, you are ready to **Connect**.
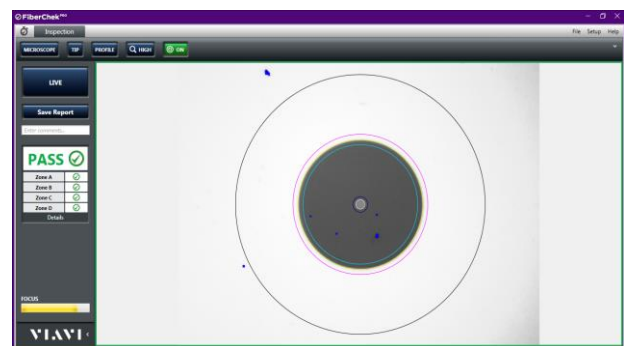

Figure 5: Failed Test

Figure 6: Passing Test

Note: Both the patch cord and bulkhead should **pass inspection before connection**.