

Quick Card

P5000i Fiber Microscope Fiber Inspection with FiberChekPRO™

This quick card describes how to use the P5000i Fiber Inspection Microscope and VIAVI FiberChekPRO software to inspect a simplex fiber end face.

Equipment Requirements:

- P5000i 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: P5000i Microscope

Set up the P5000i Microscope:

1. Connect the P5000i **USB Connector** to a **USB port** on the laptop.
2. Connect the appropriate patch cord or bulkhead **Inspection Tip** to the P5000i Fiber Inspection Microscope by loosening and tightening the **Retaining Nut** on the P5000i Fiber 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.  Press the FiberCheck PRO icon from the Windows Start menu on your PC or laptop to launch FiberChekPRO.
2. Tap the option **Tip** and **Profile** icons and select the options that match the fiber under test:



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)




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 P5000i Microscope Probe.

2.  Adjust the **Focus Control Wheel** of the P5000i microscope to focus the fiber end face. 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.

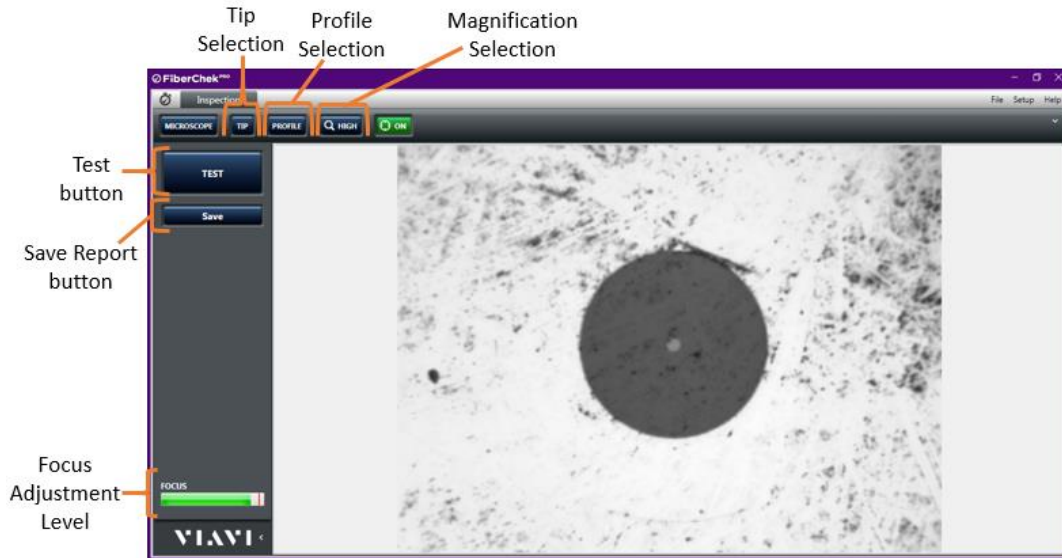




Figure 3: Live Inspection View

3. There are 2 ways to run the fiber inspection test:

-  Press the test button on the microscope.
- Press the **TEST** button on the PC/Laptop 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**.

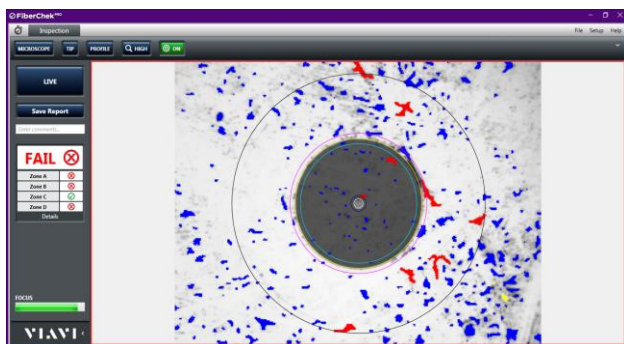


Figure 4: Failed Test

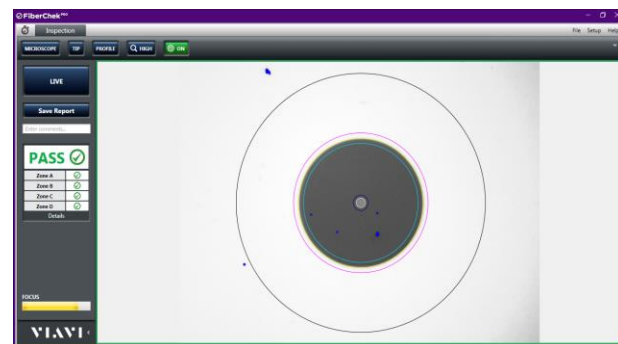


Figure 5: Passing Test

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