Quick Card

FiberChek Sidewinder™ MPO Fiber Probe Microscope
Ribbon Fiber Inspection

This quick card describes how to use the FiberChek Sidewinder Fiber Inspection Probe Microscope to inspect a Ribbon MPO fiber end face.

Equipment Requirements:
- FiberChek Sidewinder Probe Fiber Inspection Microscope
- MPO Inspection Tip matching the fiber under test
- MPO Mating Adapter (Key-up to Key-down Coupler)
- MPO Fiber optic cleaning tools

Figure 1: FiberChek Sidewinder Fiber Inspection Probe Microscope

Figure 2: MPO Tip, Multimode (VIAVI Part# FCPT-MTP)

Figure 3: MPO APC Tip, Single Mode (VIAVI Part# FCPT-MTPA)

Figure 4: MPO Coupler
The following information is required to complete the test:
- Type of MPO Fiber (Multimode or Single Mode)
- Number of fibers in the MPO Connector (12 x 1, 12 x 2)

Set up the FiberChek Sidewinder Microscope for PASS/FAIL analysis:

1. Press the Power Button to turn on the FiberChek Sidewinder.
2. From the Live Inspection View, tap the Touchscreen Display to enter the Settings Menu.
5. Select the MTP connector configuration (number of fibers x number of rows), then press the Action Button.
6. Press the Action Button again to SELECT TIP.
7. Select the appropriate tip setting, then press the Action Button.
8. Return to the Live Inspection view by pressing the Autofocus/Inspection Trigger.

Insert FiberChek Sidewinder Microscope:
- To inspect MPO Bulkhead connectors, insert the Inspection Tip into the bulkhead connector.
- To inspect MPO patch cords, insert the patch cord into the MPO Mating Adapter/Coupler and insert the Inspection Tip into the other side of the MPO Mating Adapter/Coupler.
Run Pass/Fail Analysis:
1. Ensure the Sidewinder is in the Live Inspection view. Press and hold the Autofocus/Inspection Trigger for one second and release. Hold the Sidewinder steady in the bulkhead or coupler until you hear or see the PASS/FAIL result.
   • The above process will automatically focus and test all fibers in the array.
   • To manually focus and test, use the Manual Focus/Navigation Control to adjust focus and press the Action Button to run the test.
   • Analysis may last 25 seconds to 1 minute depending on the type of MPO Connector under test.

Review results:
1. Sidewinder will briefly display the analysis result, then enter the Analysis Result view. If enabled, you will also hear an audio tone indicating whether the result is a PASS (double chime) or a FAIL (long buzzer).
   • A green screen with a “check” graphic indicates a PASS result
   • A red screen with an “X” graphic indicates a FAIL result.

2. The above Pass/Fail result indicates the result for the entire connector. If one or more fibers fail, the entire connector is recorded as a FAIL. To achieve a PASS result, all fibers must individually pass. The subsequent view shows results for individual fibers.
3. Tap the Touchscreen Display to show or hide additional information. The modes are No Overlay, Rings, and Rings + Table.

4. To move to an adjacent fiber, either use the on-screen arrows or use the arrow buttons on the Sidewinder.

5. To view only fibers that failed the analysis, select NEXT FAIL or PREVIOUS FAIL from the on-screen display.

6. Press the Action Button to save the current analysis to Sidewinder’s internal storage.

7. Press the Autofocus/Inspection Trigger to return to the Live Inspection view. To test a new MPO connector, go back to step 1 under Run Pass-Fail Analysis and restart the process following all the steps above.