

Quick Card

SmartClass Fiber MPOLx

Testing MPO/MTP terminated 12-strand fiber

This quick card describes how to use the VIAVI MPOLx for **troubleshooting and loss/length MPO fiber certification**.

Equipment Requirements:

- MPOLx MPO test kit which will include:
 - MPOLP-85(P) – MPO Power Meter
 - MPOLS-8x(P) – MPO Light Source
 - MPO/MTP FMAE adapter (APC for SM, PC for MM) (P versions)
 - 2x unpinned to unpinned Type A launch cords
 - 1x pinned to pinned Type A test cord
 - 2x MPO mating adapters
- The latest SmartClass Fiber firmware
 - To download the latest version visit <http://scf.updatemyunit.net>
- FiberChek PRO software with version 2.02 or newer
 - To download the latest version visit <http://fcpro.updatemyunit.net/>
- MPO Cleaning Tool



Configure the MPOLP-85P for the type of testing you will be performing:

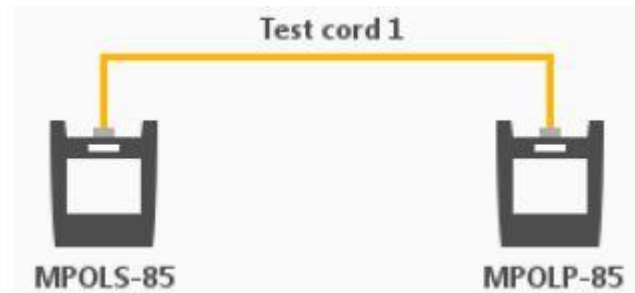
- Create and set-up a project on the MPOLP:
 - From home screen press the management icon (left side of touch screen, middle icon).
 - Select projects, press menu button, and select add.
 - Type the name of the project, tap the check mark to save.
 - Add a description, set the label prefix, label index, and auto increment as desired.
 - Press the back button and set the project to Active.
- Create and save the test configuration for the Loss/Length test you wish to perform:

Note: Setup can only be done on the MPOLP and not the MPOLS.

 - From home screen select Loss/Length.
 - Press the menu button.
 - Select a pre-set test configuration or create a new one as follows:
 - Select add – and name the test configuration (e.g. “SMF 12 Strand Test”). Select this new test configuration and create a setup for a basic loss/length test:
 - Fiber Type = MM/SM as appropriate
 - Test Limit – Link Validation. Polarity A, Length 100 meters
 - Cable Name: OM4/OS1 as appropriate
 - Cable and Connector: as appropriate
 - Test Reference Method: 1 Jumper
 - Pass/Fail Fiber Selection: as appropriate
 - Ensure the Patch Cord Microscope (PCM) settings are correct (if equipped) – using correct inspection profile (Ribbon, SM or MM (IEC-61300-3-35 Ed. 2.0) ensures the correct illumination of the end face.
 - Adjust the focus and Y axis. Turn auto-center off.

Set the reference between the two units prior to testing:

- **IMPORTANT:** Inspect all end-faces of the test cords using the built-in patch cord microscope and clean if necessary.




- Connect the units together using the supplied unpinned-to-unpinned cable as shown above.
- Units will “beep” and show a graphic indicating they are connected.
- Press the Set Reference button.
- Unit will inform you “Referencing successfully completed”. If unsuccessful, re-inspect all fiber end faces, clean where necessary, and try referencing again.

Verify that the reference was performed properly:

- Disconnect the launch cord from the MPOLP only. Leave the cord plugged into the MPOLS.
- Add the un-pinned to un-pinned receive cord to the MPOLP.
- Add two adapters (couplers) to the end of the launch cord on the MPOLP and MPOLS.
- Connect the supplied pinned to pinned cord between launch and receive cords.
- *Note the units indicate they are connected via sound and screen indicator.*
- Press auto-test – top right of screen or via menu – and review the loss measured when testing through the couplers only.
 - Ensure loss is below 0.7dB on all fibers

Perform a Loss/Length Test:

- Remove the center cord from the verification test set up.
- Replace the center (pinned-to-pinned) test cord with the fiber you wish to test, by connecting the launch cord from the MPOLS and the receive cord attached to the MPOLP to the fiber you wish to test.
- From the menu screen, press the AUTO TEST button.
- Results are stored simply by pressing the  key.

Create Test Reports:

- Using the supplied USB to micro USB cable, attach the MPOLP to a PC with the latest version of FiberChek Pro running on it.
- FiberChek Pro will automatically recognize the MPOLP device and begin to load the project data that is stored on the device.
- Check the box next to the project that contains the test results you would like to generate a pdf report for.
- Click on the IMPORT PROJECTS button in FiberChek Pro.
- Test reports will be generated in pdf format and saved in the location listed at the top of the screen in FiberChek Pro.