QUICK CARD

FiberComplete/ FiberComplete PRO with a Multi-fiber switch module to get Distance, Continuity & Polarity, Bidir IL/ORL, UniDIR & TrueBIDIR OTDR

The following procedure describes how to use FiberComplete/ FiberComplete PRO solutions with a Multi-fiber MPO switch module.

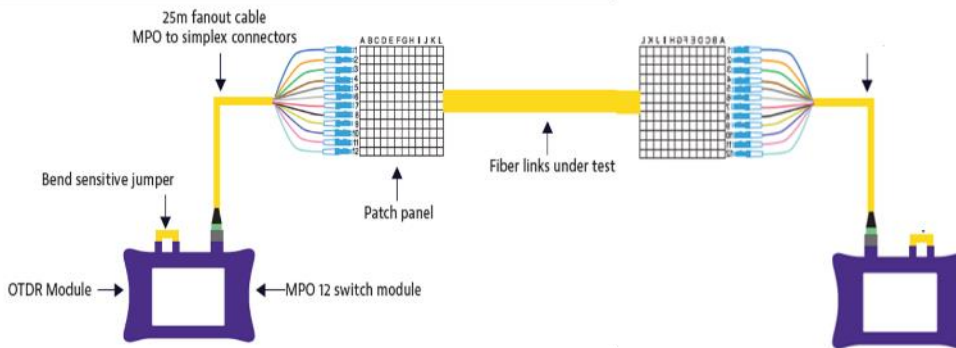Estimation time for the first getting started: 30 min.

This option will reduce the time to qualify multiple fiber links from high fiber count cables.

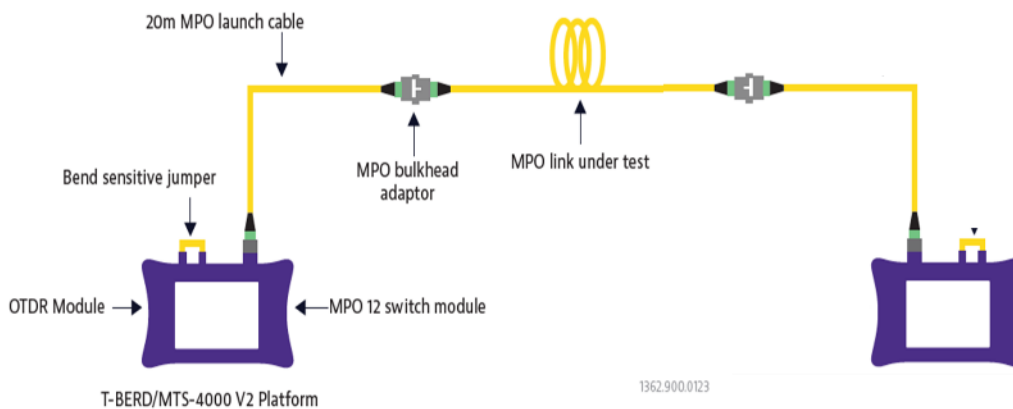Please read the entire document BEFORE starting any tests.

TEST SCENARIOS

► Two test scenarios are described in this quickcard.

1. Bi-directional automated test sequence with simplex connectors, using fanout test cables.

2. Bi-directional automated test sequence with native MPO connectors.

QUICK CARD

INSPECT AND CLEAN CONNECTORS

Before connecting a fiber to the test set, inspect and clean the tester bulkhead and the test cables (TC) connectors.

► Use a video inspection scope / probe to inspect connector end faces for dirt and/or damage. Inspect ALL connectors including bulkheads and test ports.

CONNECT AND TURN ON BOTH TEST SETS. TAP THE HOME ICON.

1. Connect the SC/APC switch module port to the FiberComplete port using the 30 cm dedicated bend insensitive jumper.
2. Repeat the operation for the 2nd mainframe.
3. Connect a launch cable to the MPO pinned switch module port. Check the switch is installed on the right side of the test set (with the screen facing front).
4. Repeat the operation for the 2nd mainframe.
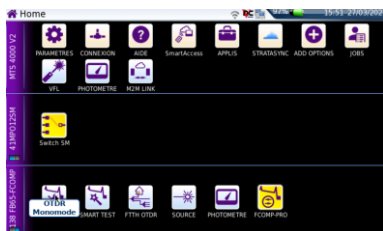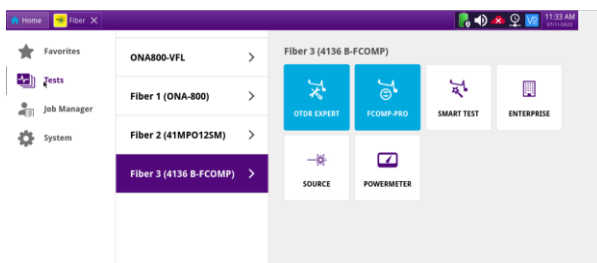5. Press the ON/OFF hard key to turn on both units.

T-BERD/MTS

One Advisor 800

ACTIVATE THE FUNCTIONS ON BOTH TEST SETS

T-BERD/MTS…:

On the HOME page, tap on the icon « FiberComplete » or « FiberComplete PRO » and the icon « Switch SM » (the icon turns yellow when app is active).
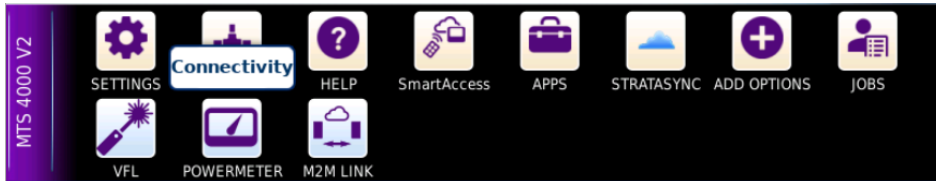

One Adivsor 800:

On the HOME page, press "Tests". Press the icon « FiberComplete » or « FiberComplete PRO » and the icon « Switch SM » to turn on the functions. (the icon turns blue when app is active).
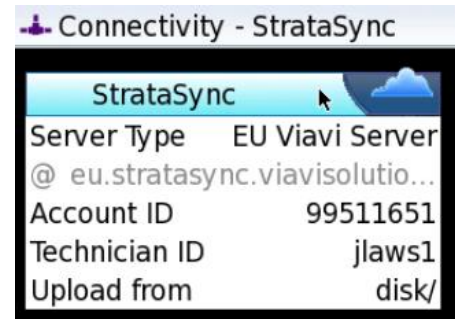
QUICK CARD

CONFIGURE ONE UNIT (Local) FOR CLOUD SYNC. (T-BERD/MTS…)

1. On the Home page, select the icon Connectivity.

2. Select StrataSync and configure the fields:

   - Server Type EU Viavi Server
   - Enter your Account ID
   - Enter your Technician ID
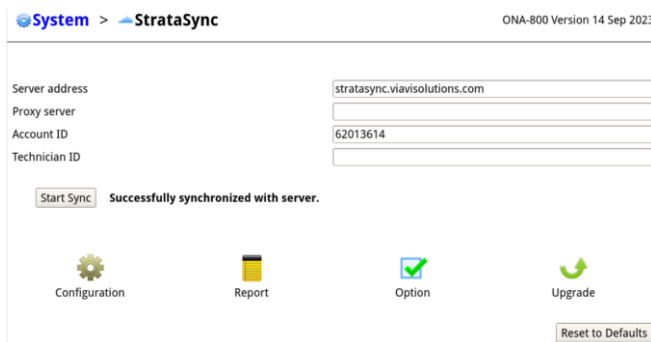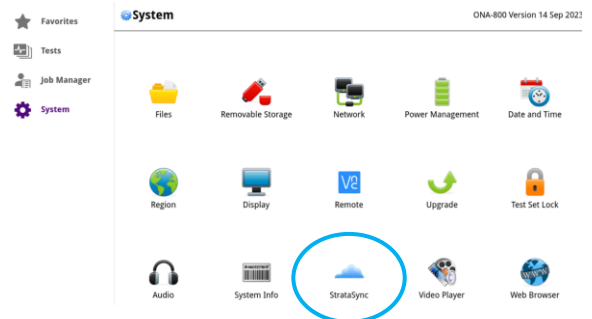   - Ensure Upload from is set to disk/

CONFIGURE ONE UNIT (Local) FOR CLOUD SYNC. (ONA800…)

1. On the Home page, select "System".

2. Select StrataSync and configure the fields:

   - Server Type EU Viavi Server
   - Enter your Account ID
   - Enter your Technician ID

VIAVI
VIAVI Solutions

QUICK CARD

PERFORM THE REFERENCES ON BOTH TEST SETS FOR BIDIR IL/ORL MEASUREMENTS

1- Select the **References** soft key. 3 Referencing methods are available.

a) Factory Ref.: fastest process, higher loss uncertainties.

b) Loopback Ref.: more accurate than Factory Ref., less accurate than Side by Side

c) Side by side Ref.: most accurate method, both test sets must be at the same location during the referencing process.

a) Factory References:

Press the factory references icon to apply the default references.

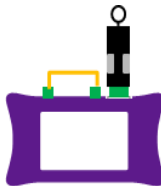#### b) Loopback / c) Side by Side:

➢ For Scenario 1 (fanout): the referencing wizard is not applicable. Follow the below instructions, Side by Side referencing will apply .
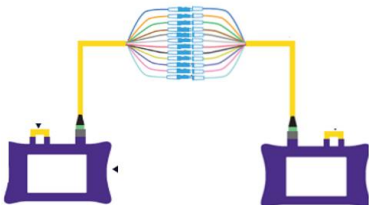
➢ Press **START REF:**

STEP 1: Zero ORL reference

• Do not connect any test jumper to the MPO switch port.

• Press OK.

STEP 2: Self reference

• Connect the MPO reflective terminal accessory directly to the MPO switch port.
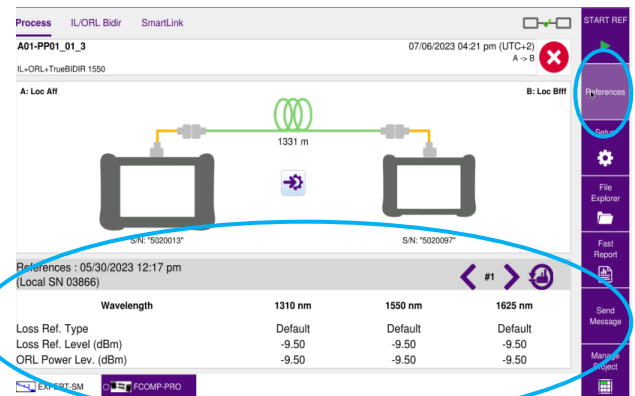
• Press OK

STEP 3: Loss reference

• Connect the two fanout test cables with a bulkhead array or with single adaptors.

• Press OK on this unit only.

➢ For Scenario 2: follow the instructions given by the referencing wizard.

2- If the references values are acceptable, press **References** again to go back to the set up. Otherwise, inspect & clean your connectors. Press Start REF again to redo the references process.
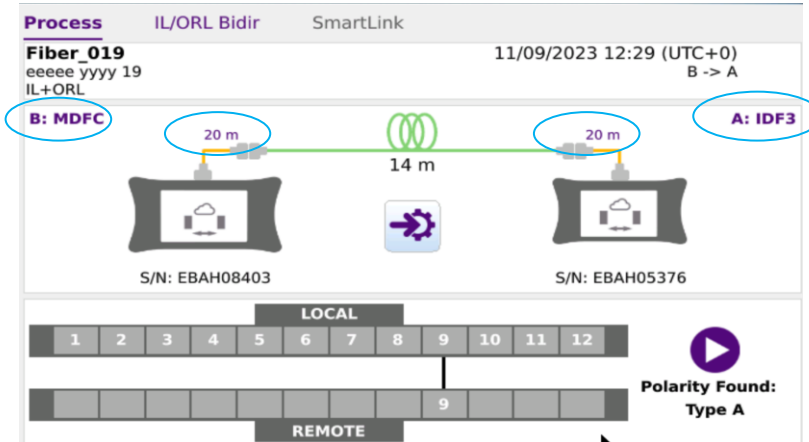
QUICK CARD

CONFIGURE ONE UNIT ONLY (the set up is automatically exchanged with the remote) - MEASUREMENT

In **Process view**:

Fill the Test cords lengths & Locations ID via the shortcuts soft keys.

Tap the **Setup** soft key.

- Press **Load config**. file. and select the pre-defined config.

Or

- Edit your configuration by following the next steps.

Test cables:

- Adjust the **Launch Cable / Receive cable** (if not done via the shortcuts)

- Adjust the **Unit** accordingly

- **Table view:** Fiber (recommended)

- **Remote unit search :** Default scan (recommended)

a) "Default scan" : fast & optimized scan (adapted to all polarities type), (optimized connectivity search on the ports 3, 4, 9 and 10). For "Point to Point" links (scenarios 1 & 2).

Fanout (12 → 1)
Any polarity

b) « Full scan » : longer but complete scan connectivity (scanning all 12 fibers, starting with port #1.). Only for Point to Multipoint links (12→1, ex. PON). by

- **Switch Port :** managed directly by the project (next step).

QUICK CARD

CONFIGURE ONE UNIT ONLY (the set up is automatically exchanged with the remote) - MEASUREMENT

IL/ORL:

- **IL/ORL Measurement:** IL/ORL Bidir (recommended)

- **Laser**: "1310/1550 nm" or "All" to enable bend detection with the OTDR.

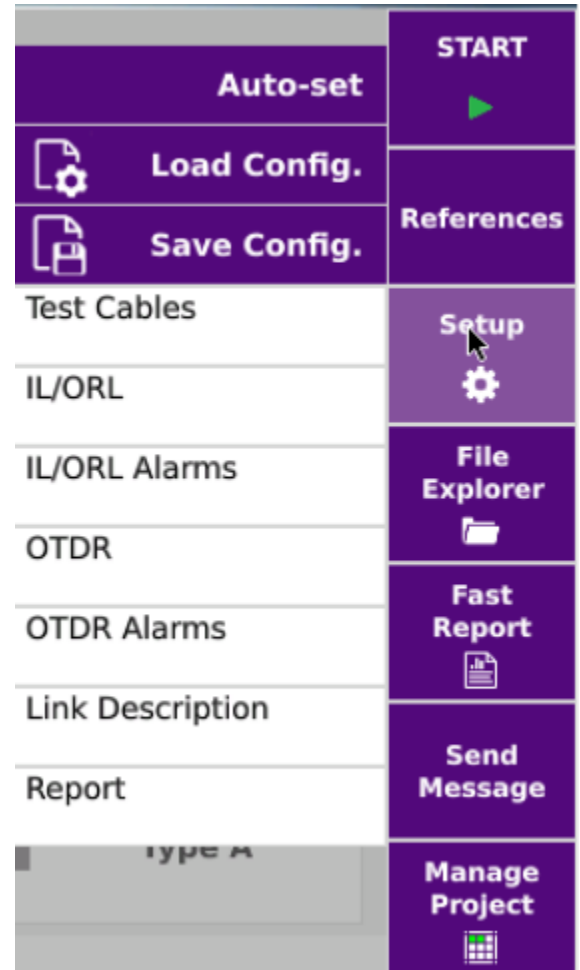- Fault Finder: No (recommended)

IL/ORL Alarms:

- **Threshold :** Default (Recommended)

OTDR:

- None

- Unidir. to perform OTDR from the local to the remote.

- Loopback

- TrueBIDIR (when license installed) : Recommended

performs OTDR in both directions, analyzes & harmonizes events from both directions, calculates the average loss and worst reflectance of each event.

- **OTDR Acq.**

    - **Auto** : Recommended

    - **Manual**: select **Pulse & Acq. time**

    - **Expert OTDR:** the OTDR set up is entirely done in Expert OTDR app for a maximum user customization

- **Laser**: "1310/1550 nm" or "All" to enable bend detection with the OTDR.

- **OTDR Alarms:**

    - **Alarm level:** Fail (Recommended)
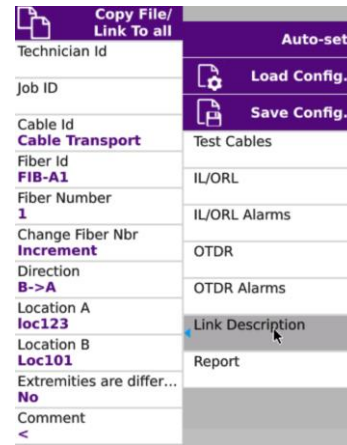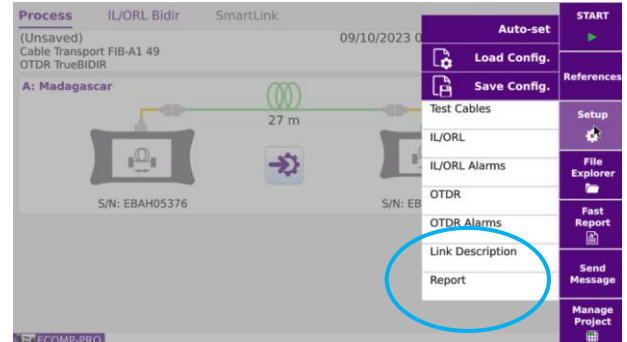
    - **Threshold :** Default (Recommended)

QUICK CARD

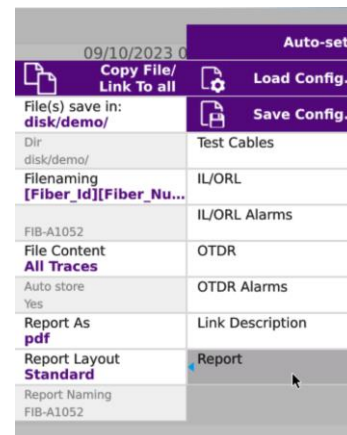**CONFIGURE ONE UNIT ONLY** (the set up is automatically exchanged with the remote) - **DATA STORAGE**

Tap **Link Description** and enter the appropriate information

- Technician Id

- Job ID

- Cable Id : no need to set up if using labels (see **Create project** section))

- Fiber ID :no need to set up if using labels (see **Create project** section))

- Fiber Number : no need to set up (see **Create project** section)

- Change Fiber Number : no need to set up (see **Create project** section)

- Direction (one unit should say A to B and the other should say B to A)

- Location A and Location B (here you can name each location)

In the Report area**:**

- File Content: One and All traces (recommended to get .sor & .msor files)
- Check the **Report As** field to select the report format selection.

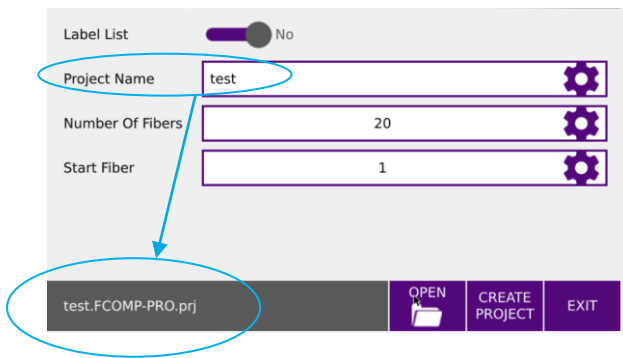All the other fields will be managed by the project. (next step).

QUICK CARD

CREATE A PROJECT FOR AN AUTOMATIC SWITCH SEQUENCE - ONE UNIT ONLY
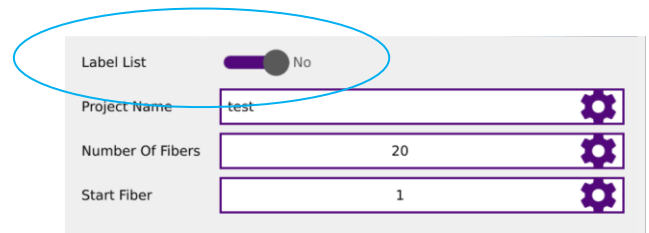
1. Tap the **MANAGE Project** soft key in order to open or create a project.

Managing the test through a project will allow the switching sequence to run automatically.

A project directory will be created, and all measurement files will automatically be stored in this dedicated directory.
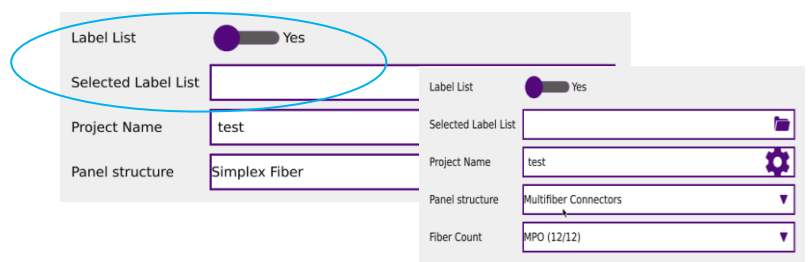

If the fibers do not have labels, just fill the project name, number of fibers and start fiber number.
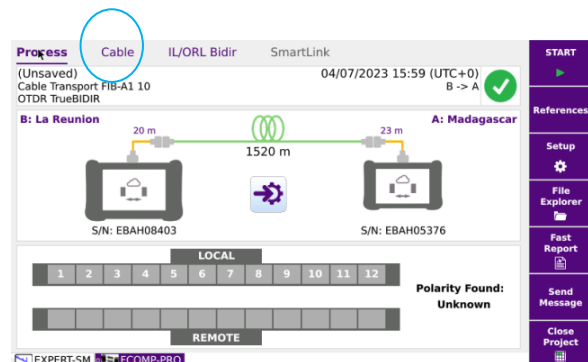
Or

If a Label list should be used, set "Label list" to Yes and browse by clicking on the "selected label list" section. A .csv label list example is stored in the Project directory.
Fill the other requested information accordingly.

2. Press "Create Project" .

A new "**Cable**" tab will pop up displaying the Project with fiber number or labels.

If a project with a similar name already exists, a pop-up message "modifying file not allowed" will be displayed.
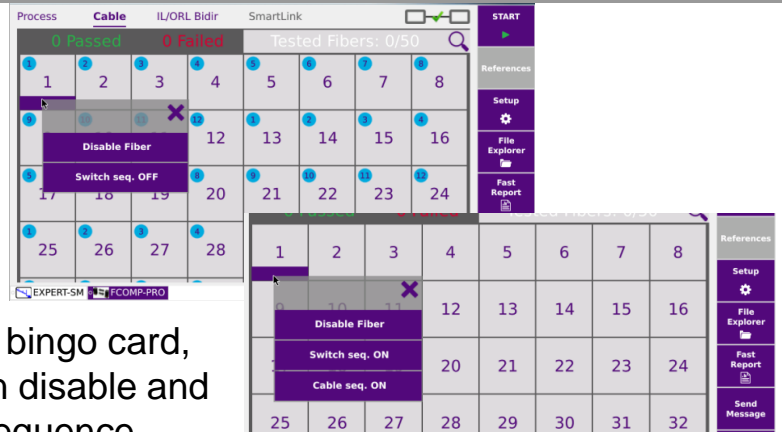
QUICK CARD

CUSTOMIZE THE TEST SEQUENCE

Project **without** fiber labels

The Cable tab will display a « bingo » card with all cases pre-selected for the test sequence (Blue circle on top left of each square).
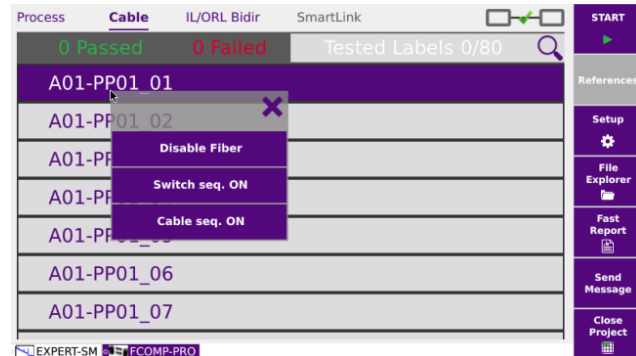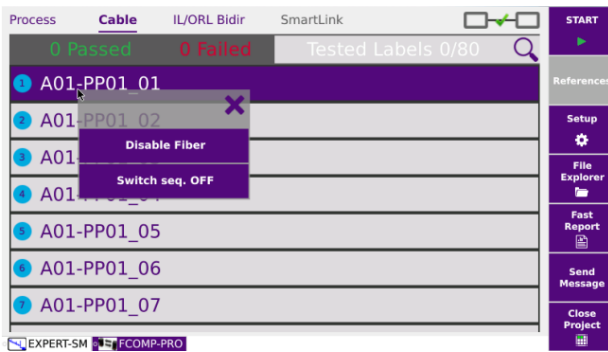
A selected fiber/label case is in purple.

By making a long press on any case of the bingo card, you have access to a select menu. You can disable and unselect one or more fibers from the test sequence, activate the switch sequence from a specific fiber (12 fibers max.) or again the full cable sequence.
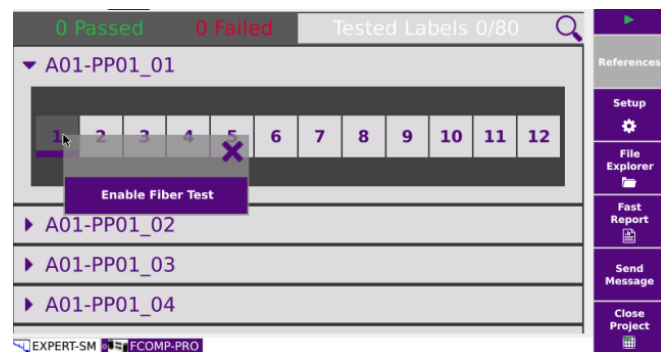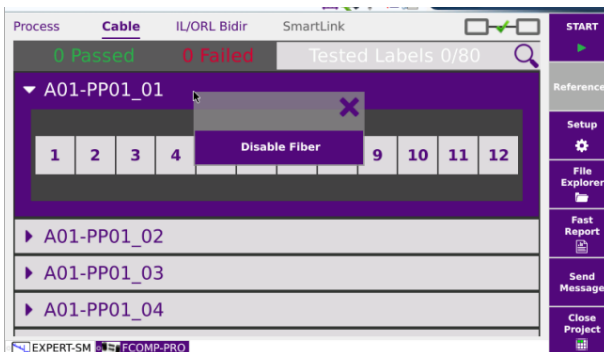
Project **with** fiber labels - Simplex connectors connectors

Same process as above.

Project **with** fiber labels - Multifiber connectors (MPO)

With Multifiber connectors, you can unselect fibers one by one with a long press.
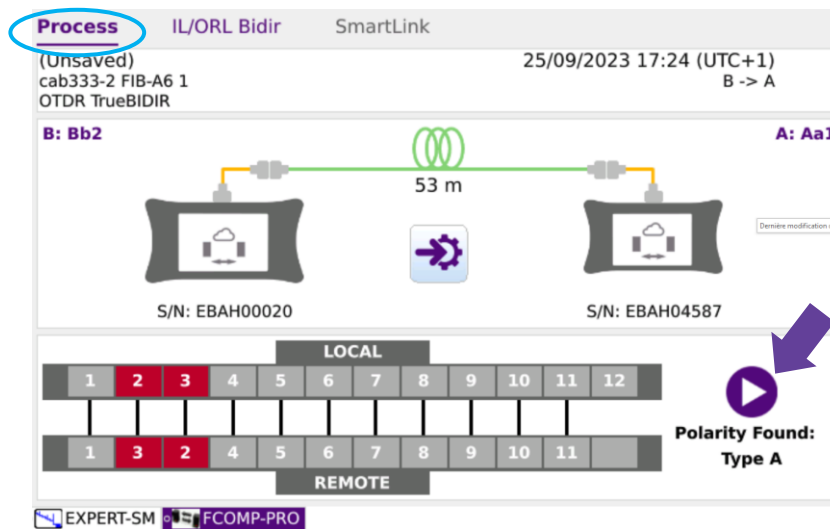
QUICK CARD

CHECK THE CONTINUITY AND POLARITY OF THE FIBER LINK

Before starting any test sequence, we recommend to perform a continuity and polarity check:

- **Continuity** : no break, missing links or reverse connections - for test Scenario 1 & 2.
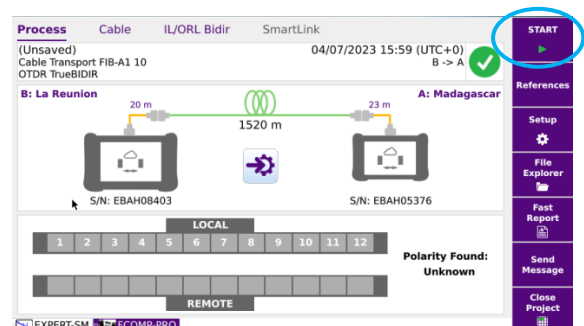- **End to end polarity** : for test scenario 2.

Go back to **Process** tab and Press the arrow key. ▶

- If there is a break or missing link: no cross line is displayed
- If there is reverse connection: red color is displayed with fiber/port number identification

RUN TESTS

1. Press **START** – preferably from Cable tab to make sure of the fiber selection. The unit initiating the START will perform the bi-directional analysis and save all results and reports for each fiber. A summary cable report will also be created. (see Generate summary project report section)

2. Once complete, a message will ask to test the next 12 fibers sequence. Prior pressing YES, please ensure you disconnect the launch/receive cables from the already tested link and connect to the next one to be tested.

3. If needed, to edit and manage test results (.fcpro/.sor/.msor), install Fiber Cable 2 software on your PC: https://ofs.updatemyunit.net/

QUICK CARD

VIEW RESULTS (from the unit which started the tests)

In **Cable tab:**

A **summary** is available on the top of the list indicating the numbers of: Passed / Failed / Tested fibers.

A **test status** is provided for each fiber with a color coding.

- Green = Passed / Red = Failed

- No color = no test performed

- Dark grey = unselected fiber

- Caution: No alarm or Stop pressed during sequence -> without color

For **Individual fiber** results: select the fiber in the cable tab (the selected fiber will be highlighted in purple)
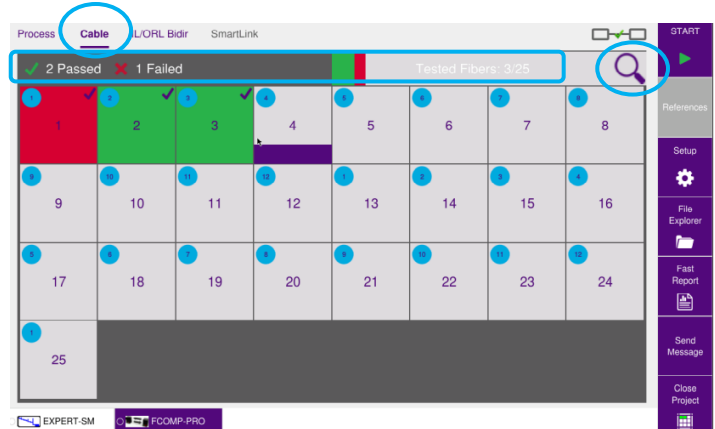
Tip: To easily find a fiber, press the search glass icon (top right). It displays a filter to select fiber number or label number.

- **Bi-directional results** : press IL/ORL Bidir tab for total link loss and ORL*. Press Smartlink tab for OTDR Averaging results (if TrueBIDIR selected in setup) or OTDR unidir (if uniDIR selected in setup).

*total link loss & ORL are either acquired from Continuous Wave or from the OTDR according to the test set up.
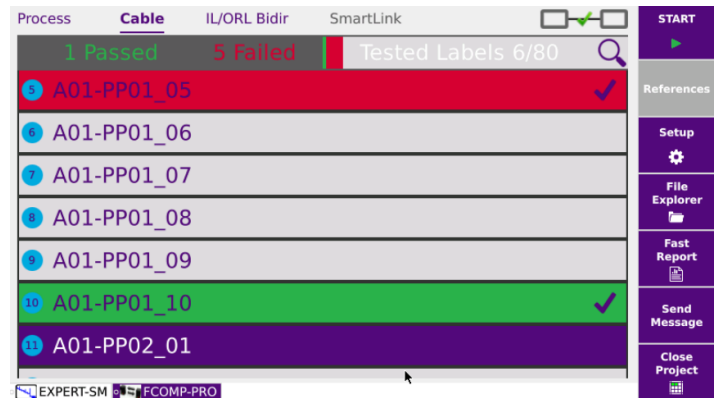
- **OTDR traces :** Switch test applications and go to the Expert OTDR app
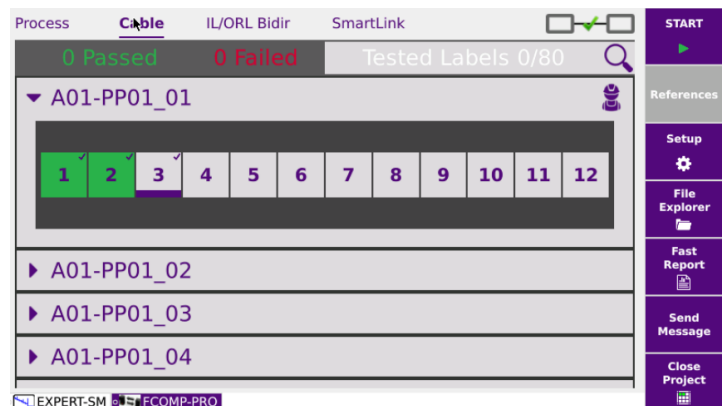
Project without label

Project with label
Simplex connectors connectors

Project with label
Multifiber connectors

QUICK CARD

VIEW TEST RESULTS (from the unit which started the tests)
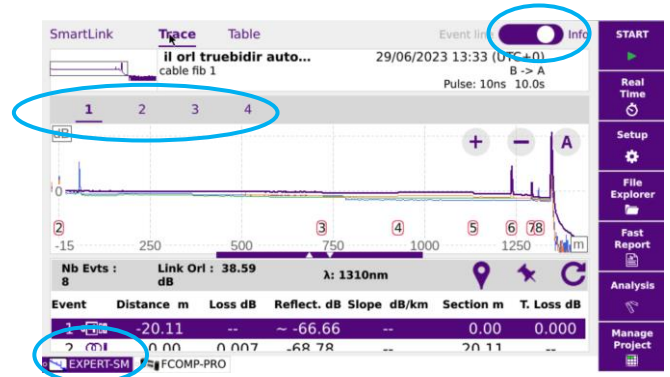
Go to « Expert- OTDR » app : Trace tab

All unidirectional traces (up to 6) are displayed for each direction (filenaming automatically contains OE (Origin Extremity), EO (Extremity Origin) and each wavelength (up to 3).

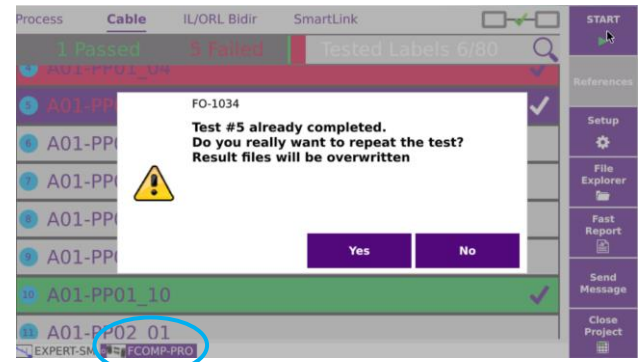The direction is indicated if « info » is selected.

Browse through each trace by selecting the trace number.

Clicking on the Smartlink or Table tabs give access to the other results representation.

RE-TEST (from the unit which started the tests)

1. Identify the cause of failure and troubleshoot the fiber

2. In the cable tab, select the fiber to be retested.

3. Hit the start button to re-test.

4. Press Yes to overwrite the existing failed results which will then be replaced.

GENERATE THE SUMMARY PROJECT REPORT

1. Press "Close Project" key

2. A summary cable report is automatically generated and stored in the project directory.