

# FlowScout® MPO OLTS Test Set

Quick Reference Guide

## Table of Contents

<b>General, Safety, and Legal .....</b>	<b>3</b>	<b>Referencing.....</b>	<b>20</b>
General Overview.....	3	Setting References.....	20
Safety Information .....	3	<b>Testing with FlowScout MPO OLTS.....</b>	<b>21</b>
Warranty Terms and Conditions.....	4	Understanding the Workflow .....	21
Apple Inc. Legal Notice .....	4	<b>Viewing Results on the OPM Tester .....</b>	<b>23</b>
<b>Hardware and User Interface Overview .....</b>	<b>5</b>	Reviewing MPO Test Results (MPO Example) .....	23
FlowScout® MPO OLTS - OPM Tester Hardware.....	5	Reviewing Duplex Test Results (Duplex Example) .....	23
Controls and Interfaces .....	5	<b>Transferring Results to PC .....</b>	<b>24</b>
FlowScout® MPO OLTS - OLS Tester Hardware .....	6	<b>Transferring Results to PC .....</b>	<b>25</b>
Controls and Interfaces .....	6	<b>Generating Reports with FlexReporter Software Suite .....</b>	<b>26</b>
Battery Charging.....	7	Using FlexReports for Downloading Test Results from FlexReporter-Cloud.....	26
Understanding Battery & Power Status.....	7	Generating Reports .....	26
Configuring FlowScout to Auto-Off .....	7	<b>Contacts .....</b>	<b>27</b>
How to View Device Information .....	8		
User Interface Overview.....	8		
Status and Navigation Bars .....	8		
Initiating the Laser .....	9		
<b>Configuring Settings.....</b>	<b>11</b>		
Home Screen Overview .....	11		
General Settings.....	12		
Project and Fiber Group Setup .....	14		
Creating New Projects.....	14		
Deleting Projects .....	14		
Creating Fiber Groups.....	15		
Copying a Fiber Group Setup.....	17		
Deleting Fiber Groups.....	17		
Test Setups.....	18		
Configuring Test Setups.....	18		



## General, Safety, and Legal

### General Overview

All models of both testers have three test ports:

Test Ports on the FlowScout MPO OLTS - OPM Tester	Test Ports on the FlowScout MPO OLTS - OLS Tester
<b>MPO OPM test port</b> This is an MPO-16 single-mode light source used for communication with the OLS tester.	<b>MPO SM OLS test port</b> This is an MPO-16 single-mode optical light source port. This port may be enabled to work as VFL visual fault locator.
<b>SM OLS test port</b> This is a single-fiber single-mode optical light source port. This port is equipped with an SC/APC connector.	<b>SM OLS test port</b> This is a single-fiber single-mode optical light source port. This port is equipped with an SC/APC connector. This port may be enabled to work as VFL visual fault locator.
<b>OPM test port</b> This is a single-fiber optical power meter port. This port can be equipped with a selection of adapters - FC, SC, LC, ST, 2.5 or 1.25 mm Universal.	<b>OPM test port</b> This is a single-fiber optical power meter port. This port can be equipped with a selection of adapters - FC, SC, LC, ST, 2.5 or 1.25 mm Universal.

The FlowScout MPO OLTS testers are fully NIST traceable on all wavelengths on the OPM port and 1310/1550 nm on the MPO test port.

### Safety Information

**WARNING!** Use of procedures or adjustments other than those specified herein may result in hazardous radiation exposure.

<b>MPO SM OLS test port:</b> 1310/1550 nm	<b>CLASS I LASER output. Do not stare into beam!</b>
<b>SM OLS test port:</b> 1310/1550 nm	<b>CLASS I LASER output. Do not stare into beam!</b>
<b>VFL Laser on the MPO SM OLS test port:</b> 650 nm	<b>CLASS IIIa LASER output. Do not stare into beam!</b>
<b>VFL Laser on the SM OLS test port:</b> 650 nm	<b>CLASS IIIa LASER output. Do not stare into beam!</b>

**NOTE!** FlowScout MPO OLTS testers equipped with Bluetooth contain the following Bluetooth Transmitter Modules:

FCC ID: FCC ID: X3ZBTMOD8

IC: IC: 8828A-MOD8

**WARNING!** Use only the specified AC adapter. Use of another type of AC adapter can damage the instrument and create the danger of fire and electrical shock.

**WARNING!** To avoid the danger of fire and electrical shock:

- Never use a voltage that is different from that for which the AC adapter is rated.
- Do not plug the unit into a power outlet that is shared by other devices.
- Never modify the power cord or excessively bend, twist, or pull it.



- Do not allow the power cord to become damaged.
- Do not place heavy objects on the power cord or expose it to heat.
- Never touch the AC adapter while your hands are wet.
- Should the power cord become seriously damaged (internal wiring exposed or shorted), contact the manufacturer to request servicing.
- **CAUTION!** Do not run any tests or perform functions that activate a tester laser unless fiber is attached to the corresponding port.
- **CAUTION!** To avoid serious eye injury, never look directly into the optical outputs of fiber optic network equipment, test equipment, patch cords, or test jumpers. Refer to your company's safety procedures when working with optical systems.
- **NOTICE:** FlowScout MPO OLTS contains no user serviceable parts, it must be returned to AFL or authorized agents for repair and calibration.
- **IMPORTANT:** Proper care in handling should be taken when using any precision optical test equipment. Scratched or contaminated optical connectors can impact the performance of the instrument. It is important to keep the dust caps in place when the unit is not being used.
- **IMPORTANT:** Always clean FlowScout MPO OLTS ports and any mating connectors using approved cleaning supplies (e.g. One-click cleaner) before mating the connectors.

## Warranty Terms and Conditions

AFL products are warranted against defective material and workmanship for a period of (1) one year from the date of delivery to the end user. Any product that is found defective within the warranty period will, at the discretion of AFL, be repaired or replaced. Warranty will be voided if the product has been repaired or altered by other than an authorized AFL product repair facility, if the void sticker has been compromised, or which have been subject to misuse, negligence, or accident. In no case shall AFL liabilities exceed the original purchase price.

## Apple Inc. Legal Notice

Made for iPhone/iPad:

FlowScout MPO OLTS is compatible with Apple iPhone 15 Pro, iPhone 15, iPad (10th generation), and iPad (9th generation). iPhone and iPad are registered trademarks of Apple.



“Made for iPhone/iPad” means that an electronic accessory has been designed to connect to iPhone and iPad models and has been certified by the developer to meet Apple’s performance standards.



## Hardware and User Interface Overview

### FlowScout® MPO OLTS - OPM Tester Hardware

#### Controls and Interfaces

Ref	Feature	Description
<b>Test Ports, Display</b>		
1	MPO SM OPM test port	This is an MPO-16 single-mode optical power meter port.
2	SM OLS test port	<b>This is a CLASS I LASER output. Do not stare into beam.</b> This is a single-fiber single-mode optical light source port. This port is equipped with an SC/APC connector.
3	OPM test Port	This is a single-fiber optical power meter port. This port can be equipped with a selection of adapters - FC, SC, LC, ST, 2.5 or 1.25 mm Universal.
4	Dust cap	Used to protect optical ports from dust/damage. It is important to keep the dust caps in place when the unit is not being used.
5	Touchscreen display	Contains on-screen controls and menus. Used to show setup menus, test results, and saved test data information.
<b>Hard Buttons and Soft Keys</b>		
6	Power button	Press to power FlowScout MPO OLTS on/off.
7	Screen-specific soft key	This is screen-specific/function-specific soft key. In the shown image example it function as a Test Start/Stop key - Press to start a new test; or stop the current test if test is running.
8	Home soft key	From any screen, press to return to the Home screen.
9	Back soft key	Press to return to previous screen
<b>Ports and Indicators</b>		
10	USB port	USB port for charging, transferring results, and firmware upgrade.
11	AC/Charger indicator	Illuminates when USB is connected and indicates battery charging status. <ul style="list-style-type: none"><li>• RED light = rechargeable battery is charging.</li><li>• GREEN light = rechargeable battery is fully charged.</li></ul>
12	Speaker	Produce audible tones(test pass, test fail, etc.)





## Hardware and User Interface Overview

### FlowScout® MPO OLTS - OLS Tester Hardware

#### Controls and Interfaces

Ref	Feature	Description
<b>Test Ports and Display</b>		
1	MPO SM OLS test port	This is a <b>CLASS I LASER</b> output. Do not stare into beam. This is an MPO-16 single-mode optical light source port. This port may be enabled to work as VFL visual fault locator - <b>This is a CLASS IIIa LASER output. Do not stare into beam.</b>
2	SM OLS test port	<b>This is a CLASS I LASER output. Do not stare into beam.</b> This is a single-fiber single-mode optical light source port. This port is equipped with an SC/APC connector. This port may be enabled to work as VFL visual fault locator - <b>This is a CLASS IIIa LASER output. Do not stare into beam.</b>
3	OPM test Port	This is a single-fiber optical power meter port. This port can be equipped with a selection of adapters - FC, SC, LC, ST, 2.5 or 1.25 mm Universal.
4	Dust cap	Used to protect optical ports from dust/damage. It is important to keep the dust caps in place when the unit is not being used.
5	Touchscreen display	Contains on-screen controls and menus. Used to show setup menus, test results, and saved test data information.
<b>Hard Buttons and Soft Keys</b>		
6	Power button	Press to power FlowScout MPO OLTS on/off.
7	Screen-specific soft key	This is screen-specific soft key. In the shown image example, this key has no function.
8	Home soft key	From any screen, press to return to the Home screen.
9	Back soft key	Press to return to previous screen
<b>Ports and Indicators</b>		
10	USB port	USB port for charging, transferring results, and firmware upgrade.
11	AC/Charger indicator	Illuminates when USB is connected and indicates battery charging status. <ul style="list-style-type: none"><li>• RED light = rechargeable battery is charging.</li><li>• GREEN light = rechargeable battery is fully charged.</li></ul>
12	Speaker	Produce audible tones(test pass, test fail, etc.)





## Battery Charging

You may charge the battery while your FlowScout® MPO OLTS is switched on or off by using the AC-to-USB power adapter/charger. Any sufficiently rated AC-to-USB power adapter can be used to charge the FlowScout MPO OLTS battery.

- Plug the included AC-to-USB power adapter/charger into AC outlet.
- Using USB-A to USB-C cable connect AC-to-USB power adapter to the FlowScout MPO OLTS USB-C port.
- FlowScout MPO OLTS charges while operating. However, the device will charge faster if powered off while connected to the AC-to-USB power adapter.
- A fully-charged battery operates for approximately 8 hours of typical use.
- Charger indicator and Battery icon will indicate charging status as shown below.

## Understanding Battery & Power Status

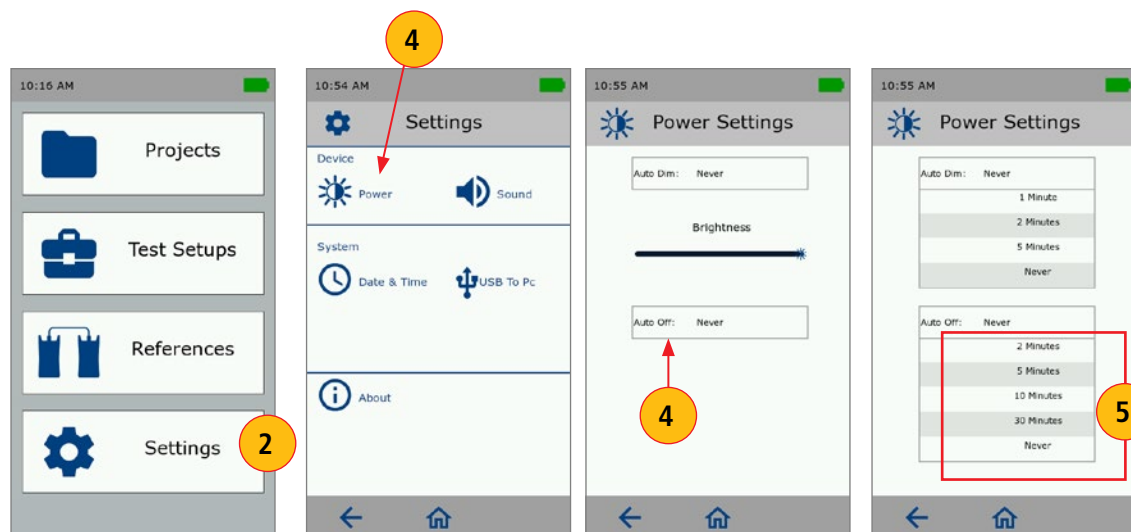
State	Power Indicator	Fully Charged	¾ Charged	½ Charged	¼ Charged	<10% Charged
Not Charging / On	Power Icon (software)					
	Charger Indicator	Off				
Charging / On	Power Icon (software)					
	Charger Indicator					
Charging / Off	Power Icon (software)	N/A				
	Charger Indicator					

## Configuring FlowScout to Auto-Off

The Auto-Off feature is available for conserving battery power on your FlowScout® MPO OLTS.

### To Configure the Auto-Off Timer:

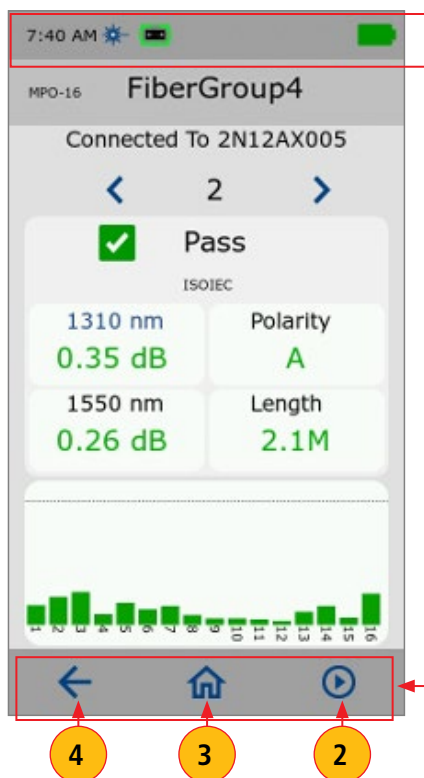
1. Turn your FlowScout MPO OLTS On.
2. From the displayed Home screen, touch Settings -
3. In the Settings menu, select the Power option.
4. Next, touch the Auto-Off menu
5. Select the desired power save option (5, 10, 20, 30 minutes, Never).
















## User Interface Overview

### Status and Navigation Bars



Status bar displays: date stamp, laser source on/off, MPO/LC connector status, Bluetooth on/off (future – OPM only), and battery charge status

Status Bar Indicators							
Time Format	Laser		Connector Status		Bluetooth		Battery
12-hour		On		MPO connected		On	
24-hour				MPO Disconnected		Off	
				LC Connected			
				LC Disconnected			

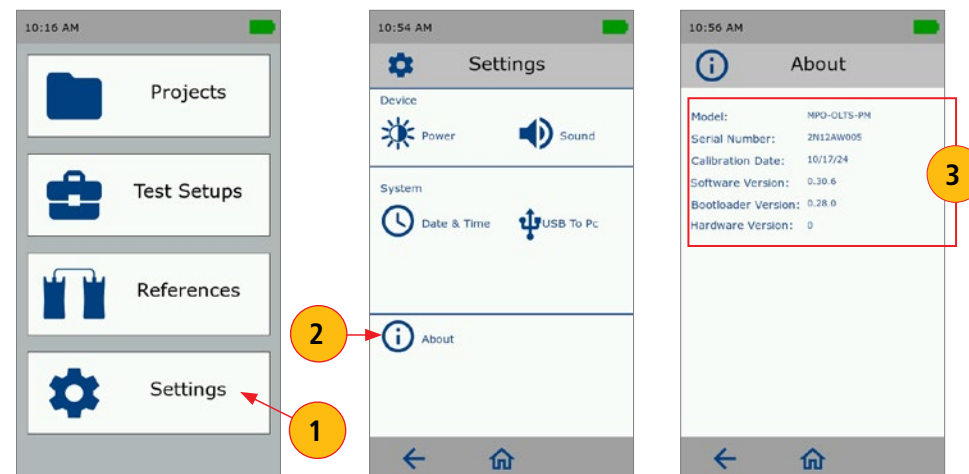
\* See ["Understanding Battery & Power Status" on page 7](#)

Ref	Feature	Description
1	Navigation Bar	Displays icons/ labels of 3 soft keys located under each icon.
2	Screen-specific Soft Key	In the shown image, this icon indicates the Test Start/Stop soft key. Touch this icon or press the soft key below it to start a new test; or stop the current test if test is running.
3	Home Key icon	Touch this icon or press the soft key below it to return to the Home screen.
4	Back Key icon	Touch this icon or press the soft key below it to return to the previous screen.

### How to View Device Information

FlowScout® MPO OLTS model number, serial number, calibration date, software revision, bootloader version, and hardware version may be viewed from the About screen, which is accessed from the Home > Settings screen.

1. From the Home screen, touch Setting.
2. From the displayed screen, touch About.
3. View the FlowScout MPO OLTS Info displayed on the the About screen.







## Initiating the Laser

The following procedures are used to initiate the laser. These are specific to the OPM and OLS testers.

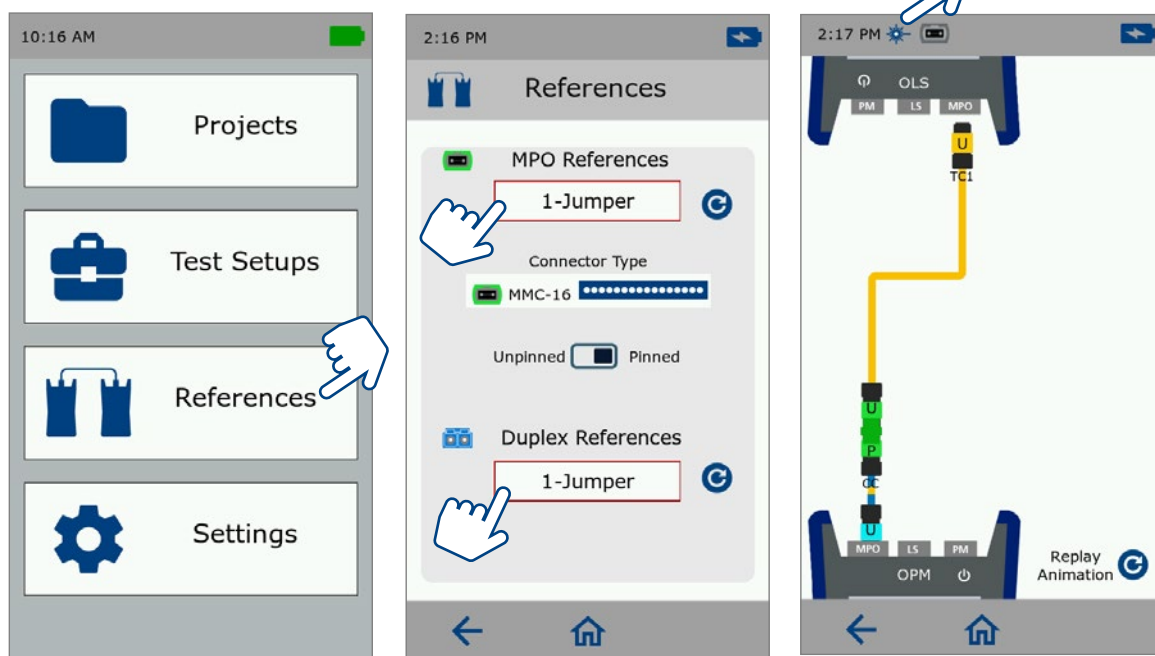
### OPM Tester:

On the OPM tester the laser may be initiated in two ways:

- From the References screen
- From the existing Project at port Level

#### Initiate the laser from the References screen

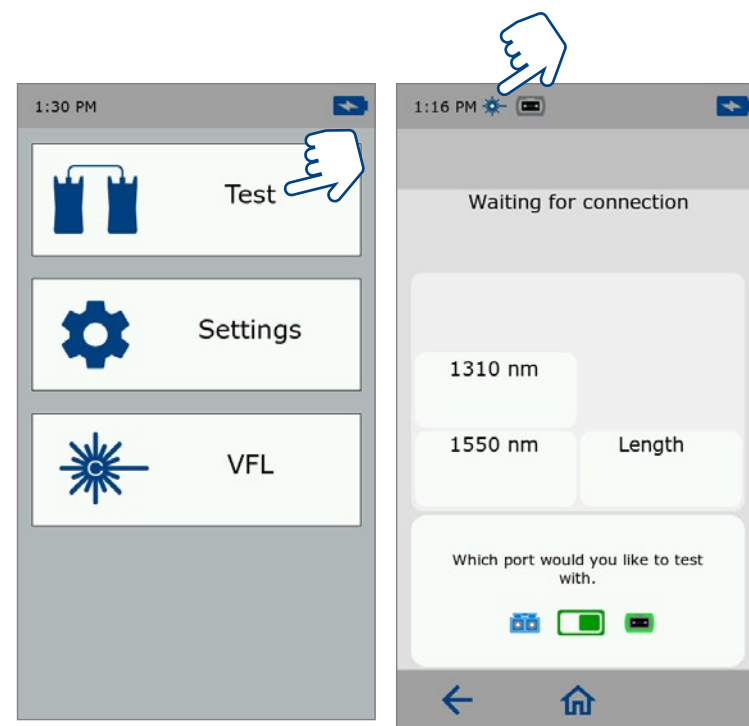
- Touch the Reference button
- Depending on your testing, touch either MPO or Duplex Reference method
- When the Referencing screen displayed, note that the laser icon appears on the status bar



### OLS Tester:

On the OPM tester the laser may be initiated from the Home screen:

- Touch the Test button
- When the test screen is displayed, note that the laser icon appears on the status bar

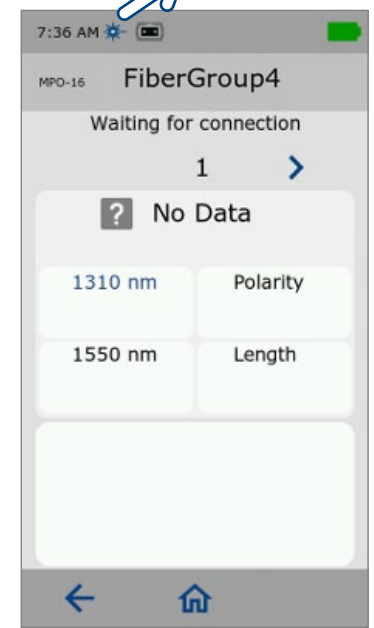
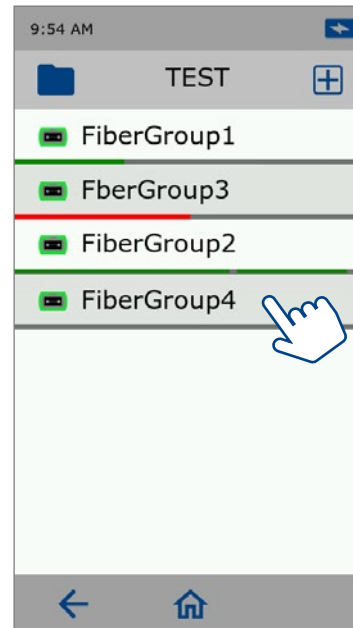
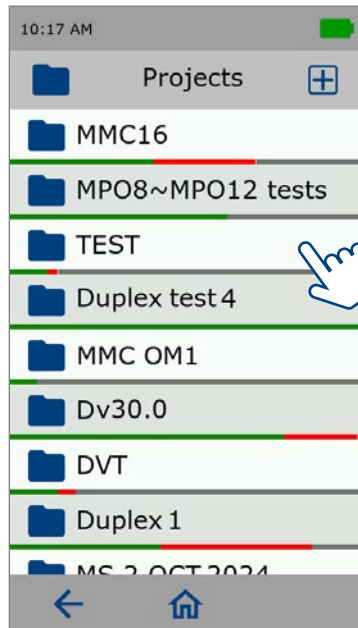
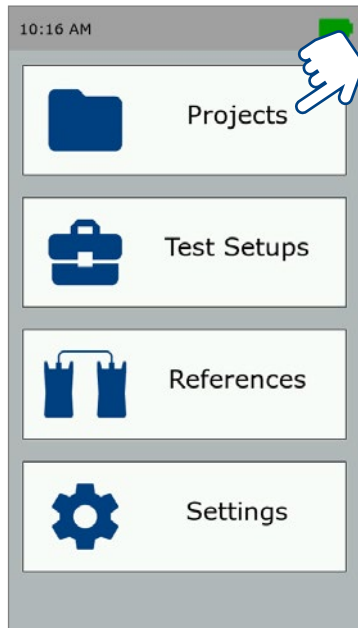




### OPM Tester:

**Initiate the laser from the existing Project at Port level**

- Display Projects by touch the Projects button.
- Next, select and open the desired Project by touching it's name.
- Next, select and open the desired Fiber Group by touching it's name.
- Touch any Port
- On the OLS tester home screen, press the TEST button
- When the Testing screen is displayed, note that the laser icon appears on the status bar





## Configuring Settings

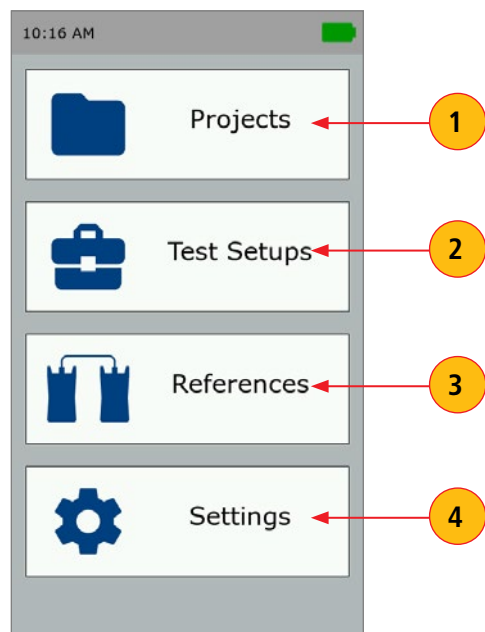
### Home Screen Overview

Home screen is the first screen you see on the FlowScout MPO OLTS tester startup.

#### OPM Tester Home Screen:

The Home screen on the OPM tester allows the user to perform the following setups

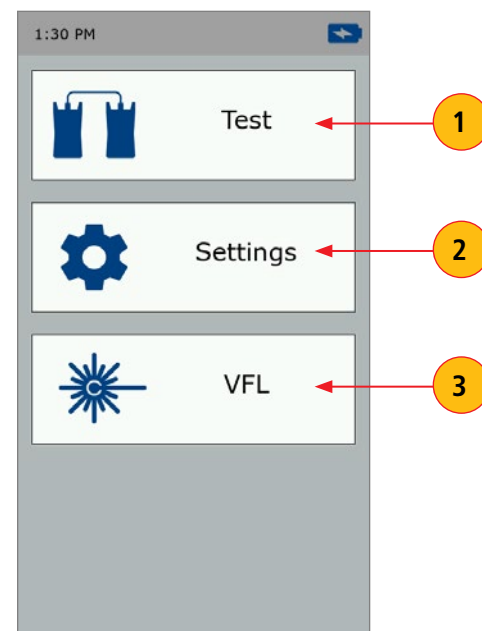
1. Create new Projects and new Fiber Groups within Projects. Projects and Fiber Groups re stored on the FlowScout MPO OLTS - OPM tester.
2. Configure Test Setups. Test Setups are stored on the FlowScout MPO OLTS - OPM tester.
3. Configure and perform Referencing. Referencing (or re-referencing) is initiated from the FlowScout MPO OLTS - OPM tester.
4. Perform General Setting.



#### OLS Tester Home Screen:

The Home screen on the OLS tester allows the user to perform the following setups

1. Initiate Test per setups performed on the OPM tester.
2. Perform general Setting.
3. Initiate the VFL (Visual Fault Locator) functionality.





## General Settings

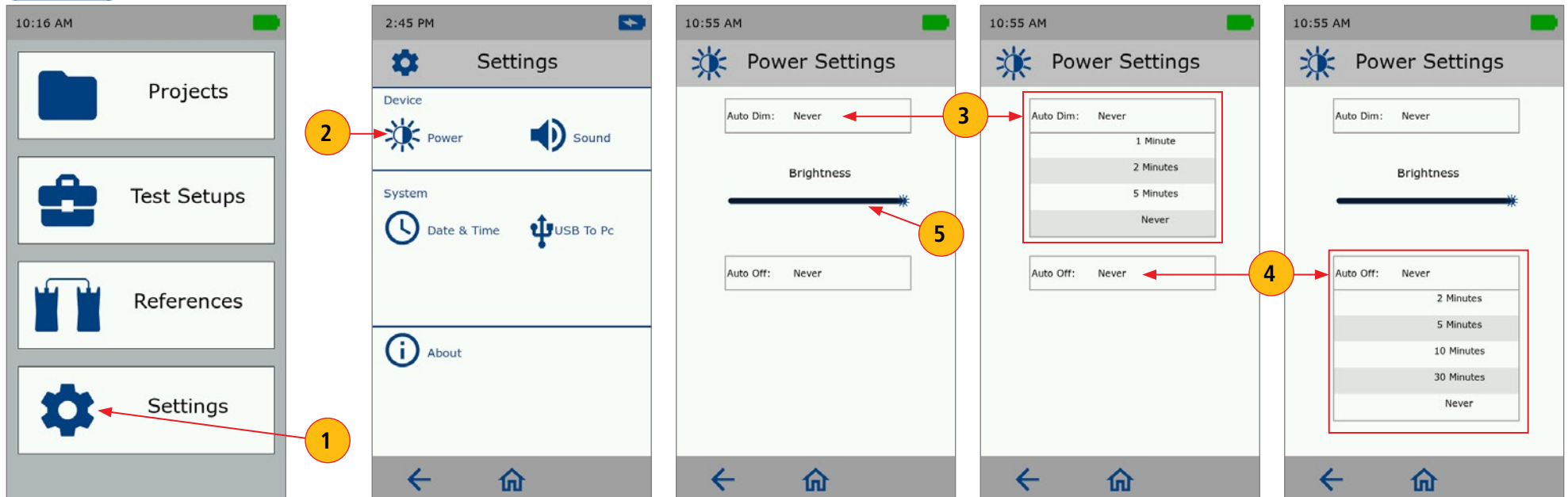
Test Setups are performed on both testers, FlowScout MPO OLTS OPM tester and OLS tester.

1. From the tester Home screen, touch Settings. From the Settings screen you may perform general setup as follows:
  - Power
  - Sound
  - Date & Time
  - USB to PC
  - About
2. Touching Power allows configuring Auto Dim time, Auto Off time, and adjust the display Brightness.

### Power Settings

3. To configure Auto Dim, touch its field and select the desired option from the displayed list.
4. To configure Auto Off, touch its field and select the desired option from the displayed list.

### OPM Tester





5. To adjust the display Brightness, drag its slider to the desired level.

#### Sound Settings

6. In the Settings Screen, touch Sound. Next, drag the volume slider to adjust to the desired level.

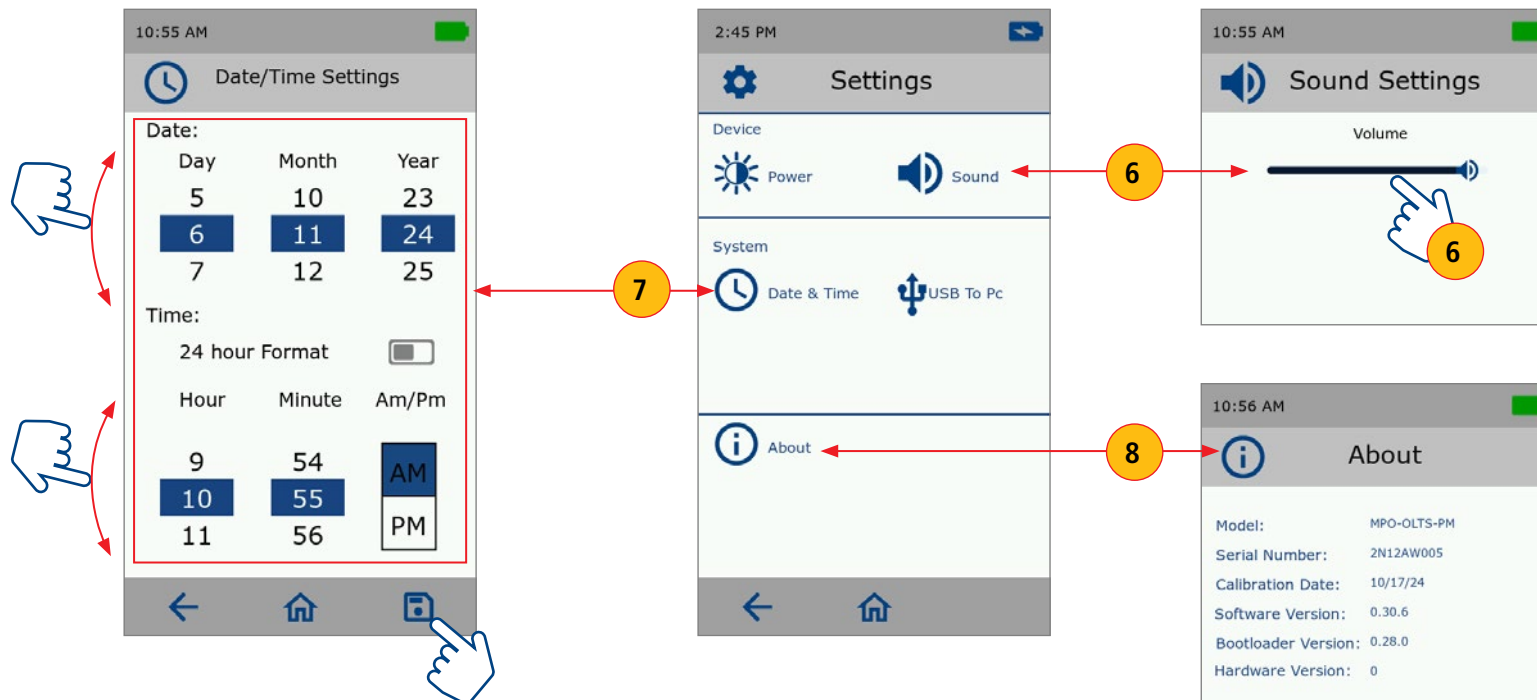
#### Date & Time

7. In the Settings Screen, touch Date & Time to adjust hours, minutes, AM/PM as needed.

- Use the on-screen Spinner to adjust the desired parameter: day/month/year and hour/minute/AM/PM.
- Touch Save to store settings

#### Date & Time

8. About





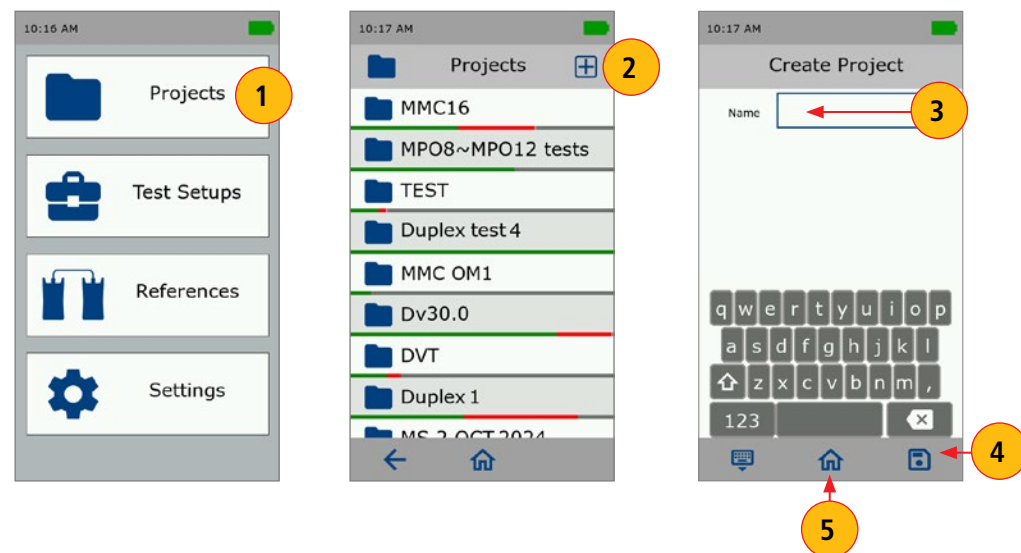
## Project and Fiber Group Setup

### Creating New Projects

#### FlowScout MPO OLTS - OPM Tester

Projects are created and stored on the OPM tester.

1. From the FlowScout MPO OLTS Home screen, touch Projects to display Projects screen.
2. Touch Add icon.
3. Enter Project Name. Maximum Project Name = 20 Characters.
4. Touching Save will store the newly created Project and return to the Projects screen.
5. Touching Home will return to the MPO OLTS Home screen without saving selected parameters.

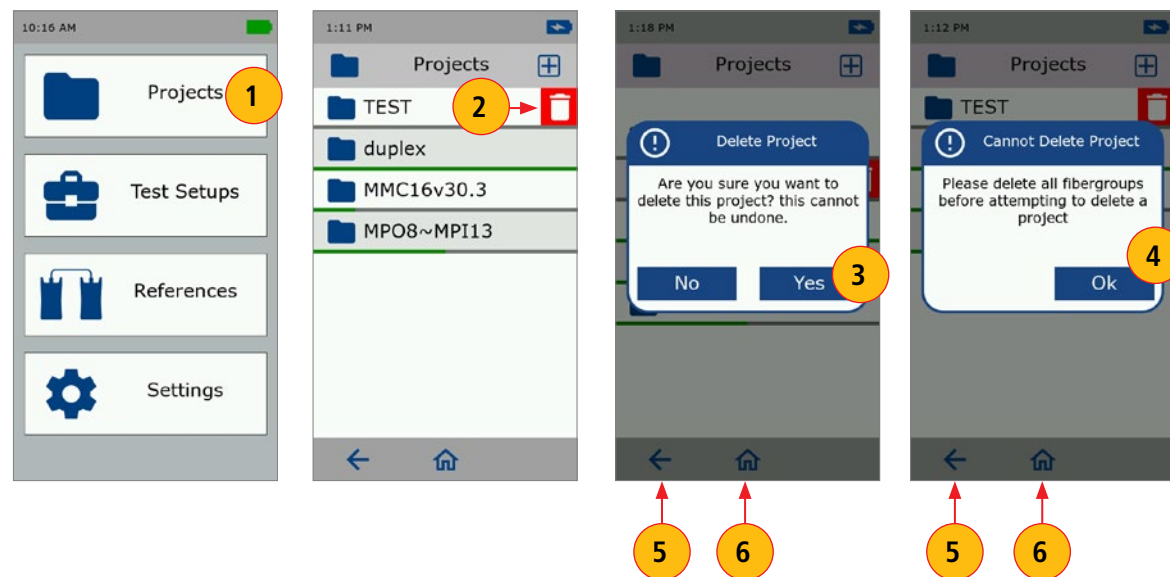


### Deleting Projects

#### FlowScout MPO OLTS - OPM Tester

Projects can be deleted from the OPM tester.

1. From the FlowScout OPM tester Home screen, touch Projects to display Projects screen.
2. Slide left from the edge of the desired Project name to display the Delete icons. Touch Delete.
3. If a Project selected for deletion does not contain Fiber Groups, Confirm deletion by touching Yes.
4. If a Project selected for deletion contains Fiber Groups, you will be notified to delete Fiber Groups first.
  - Touch OK and display Fiber Groups by touching Project name.
  - Delete all Fiber Groups in the Project, see section ["Deleting Fiber Groups" on page 17.](#)
  - Return to Project screen and proceed with the deletion; repeat steps 2 and 3.
5. Touching Back will return to the previous screen.
6. Touching Home will return to the FlowScout MPO OLTS Home screen.

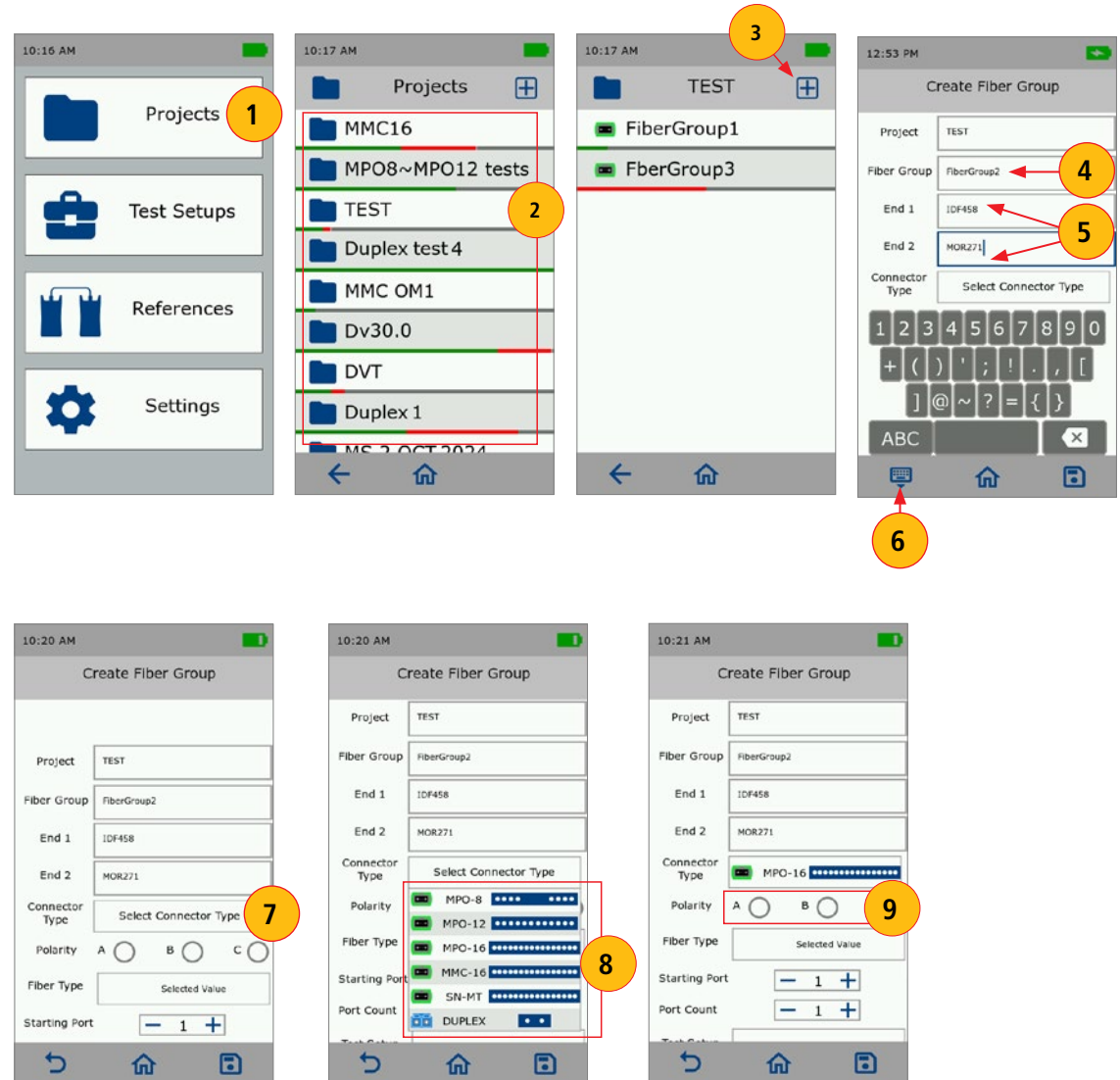


## Creating Fiber Groups

### FlowScout MPO OLTS - OPM Tester

Fiber Groups are created and stored on the OPM tester.

1. From the OPM tester Home screen, touch Projects.
2. Navigate to the desired project and touch it to open and display Fiber Groups within that Project.  
**Note:** You may view Ports test status of the existing Fiber Group by touching its name and displaying Ports test statu of that Fiber Group.
3. Touching Add icon will display Create Fiber Group screen.
4. Enter a preferred name for the new Fiber Group (e.g. FiberGroup2).
5. Specify End 1 and End 2 names.  
**Note:** Maximum allowed characters for End Names = 20.
6. Touch Keyboard icon to hide on-screen keyboard and display more options.
7. Touch Select Connector Type to select.
8. From the displayed list, select the connector type to be tested.
9. Next, identify Polarity (multi-fiber only). Polarity selection depend on the previously selected Test Setup option.







10. Select Fiber Type.

11. Identify Starting Port and Port Count.

12. Select Test Setup.

**Note:** Test Setups need to be configured prior to the Fiber Group creation in order to be displayed as available options at this step. See [“Configuring Test Setups” on page 18.](#)

13. Enter number of Connectors and Splicers.

14. Touching Save will store the newly created Fiber Group and return to the Fiber Groups screen.

**Note:** keep in mind that touching Home will not store the created Fiber Group, it will return to the MPO OLTS Home screen without saving parameters.

15. Once display returns to the Fiber Groups screen, note that newly created Fiber Group (FiberGroup2). appears on the list. Touch the newly created Fiber Group (FiberGroup2) and view ports details.

16. Ports details screen displays that ports are ready to be tested. Note that test status is shown as [?] - not tested.

**Note:** Ports test status of the tested Fiber Group may be indicated as Not Tested/Pass/Fail as follows:

- Not Tested   - Pass   - Fail

17. Touching Back will return to the previous screen.

18. Touching Home will return to the MPO OLTS Home screen.

14

17

18

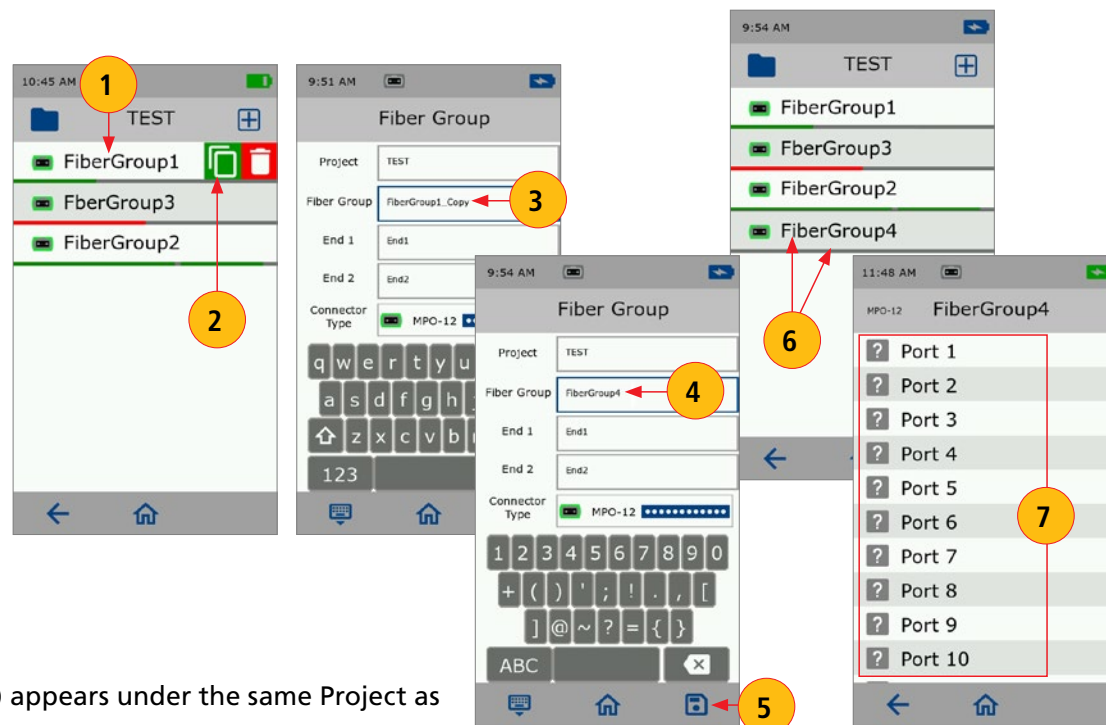


## Copying a Fiber Group Setup

### FlowScout MPO OLTS - OPM Tester

The setup of an individual Fiber Group can be replicated for additional Fiber Groups without having to duplicate the setup.

1. In the screen example below, "FiberGroup1" is configured and some of the ports are tested
2. Slide left from the edge of the desired Fiber Group name to display the Copy and Delete icons. Touch Copy.
3. Next, you will see the Fiber Group Configuration screen.
  - Note that Fiber Group name is indicated as a 'Copy' of the FiberGroup1.
4. The copied Fiber Group name can be edited as desired.
  - Note that the new fiber group will have the exact same set-up as the original fiber group.
5. Touch Save.
6. The newly created Fiber Group (FiberGroup4 in our example) appears under the same Project as the original Fiber Group.
  - Note that testing status bar is gray, indicating no tests have been done yet.
7. Touch the newly created Fiber Group name (FiberGroup4) and view ports details. Ports details screen displays that ports are ready to be tested. Note that test status is shown as [?] - not tested.

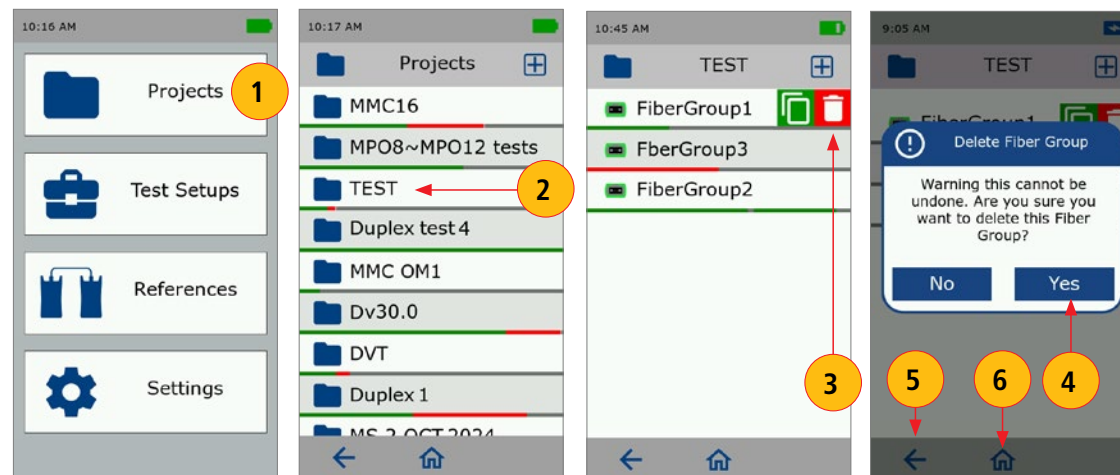


## Deleting Fiber Groups

### FlowScout MPO OLTS - OPM Tester

An individual Fiber Group can be deleted from a Project.

1. From the OPM tester Home screen, touch Projects.
2. Select the desired Project by touch its name to display Fiber Groups.
3. In the Fiber Groups Screen, slide left from the edge of the desired Fiber Group name to display the Copy and Delete icons. Touch Delete.
4. Confirm deletion by touching Yes.
5. Touching Back will return to the previous screen.
6. Touching Home will return to the MPO OLTS Home screen.





## Test Setups

### Configuring Test Setups

#### FlowScout MPO OLTS - OPM Tester

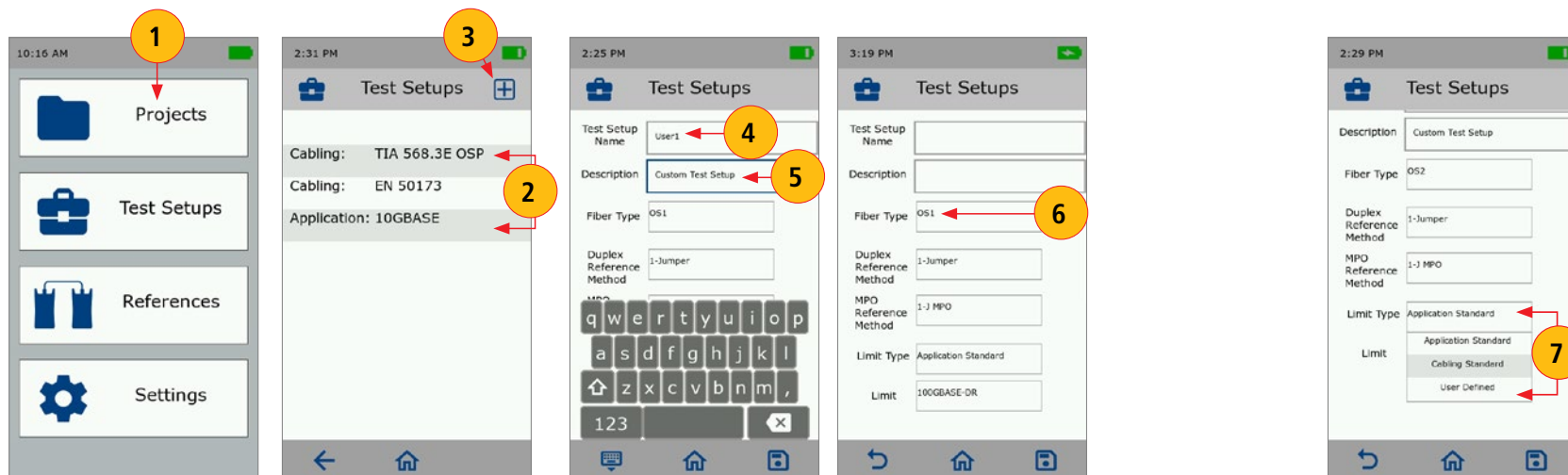
Test Setups are created and stored on the OPM tester.

Test Setups are created to simplify the test process. They include the following parameters:

- Name and Description
- Fiber Type
- Reference Method
- Test Limit Type: Application Standard, Cabling Standard, or User-defined

1. From the FlowScout MPO OLTS Home screen, touch Test Setups.
2. The Test Setups screen displays previously created test Setups or blank if no previously created Test Setups.
3. Touch Add icon.
4. Enter Test Setup name.
5. Add Description as needed.
6. Select Fiber Type.
7. Chose Limit Type.

**Note:** Limit Type selections controls all the following setups.





### Option I - Application Standard Selected

8. If Application Standard option is selected for the Limit Type, touch Limit to select one of the available Application Standards form the list.

### Option II - Cabling Standard Selected

9. If Cabling Standard option is selected for the Limit Type, touch Limit to select one of the available Cabling Standards form the list.

### Option III - User Defined Selected

10. If User Defined option is selected for the Limit Type, limits are user-set and need to be defined. The user will need to indicate limits as follows: Max Fiber Loss, Length Limit, Loss per Connector Type 1/2/3/4, Loss per Splice.

11. Touching Save will store the newly created Test Setup and return to the Test Setups screen.

**Note:** keep in mind that touching Home will not store the created Test Setup, it will return to the MPO OLTS Home screen without saving.

12. Once display returns to the Test Setups screen, note that newly created Test Setup appears on the list.

**Note:** you may view any of the Test Setup details by touching its name and displaying the setup details screen.

13. Touch Home will return to the MPO OLTS Home screen.

### Limit - Application Standard

1:50 PM

Test Setups

Fiber Type OS2

Duplex Reference Method 1-Jumper

MPO Reference Method 1-J MPO

Limit Type Application Standard

Limit

- 10GBASE-DR
- 10GBASE-LR
- 25GBASE-LR
- 25GBASE-ER
- 40GBASE-LR4
- 40GBASE-ER4

8

### Limit - Cabling Standard

1:50 PM

Test Setups

Fiber Type OS2

Duplex Reference Method 1-Jumper

MPO Reference Method 1-J MPO

Limit Type Cabling Standard

Limit

- EN-50173
- EN-50173
- ISO/IEC 14763-3
- TIA 568.3-D I/O
- TIA 568.3-D OSP
- TIA 568.3-E I/O

9

### Limit - User Defined

Limit Type User Defined

fiberLoss 1310 Max Fiber Loss (dB) 1550 Max Fiber Loss (dB)

10

Length Limit 0 M

Loss Per Connector Type 1 .75 dB

Loss Per Connector Type 2 .75 dB

Loss Per Connector Type 3 .75 dB

Loss Per Connector Type 4 .75 dB

Loss Per Splice .3 dB

11

12

13

Limit can be set by total loss or length

Limit can be set by aggregate of up to 4 different connector types

2:31 PM

Test Setups

Cabling: TIA 568.3E OSP

Cabling: EN 50173

Application: 10GBASE

User: User1

Custom Test Setup

12

13



## Referencing

**Important:** Clean all fiber optic connectors and optical ports before performing test procedures described below!

### Setting References

Referencing (or re-referencing) must be performed in any of the following cases:

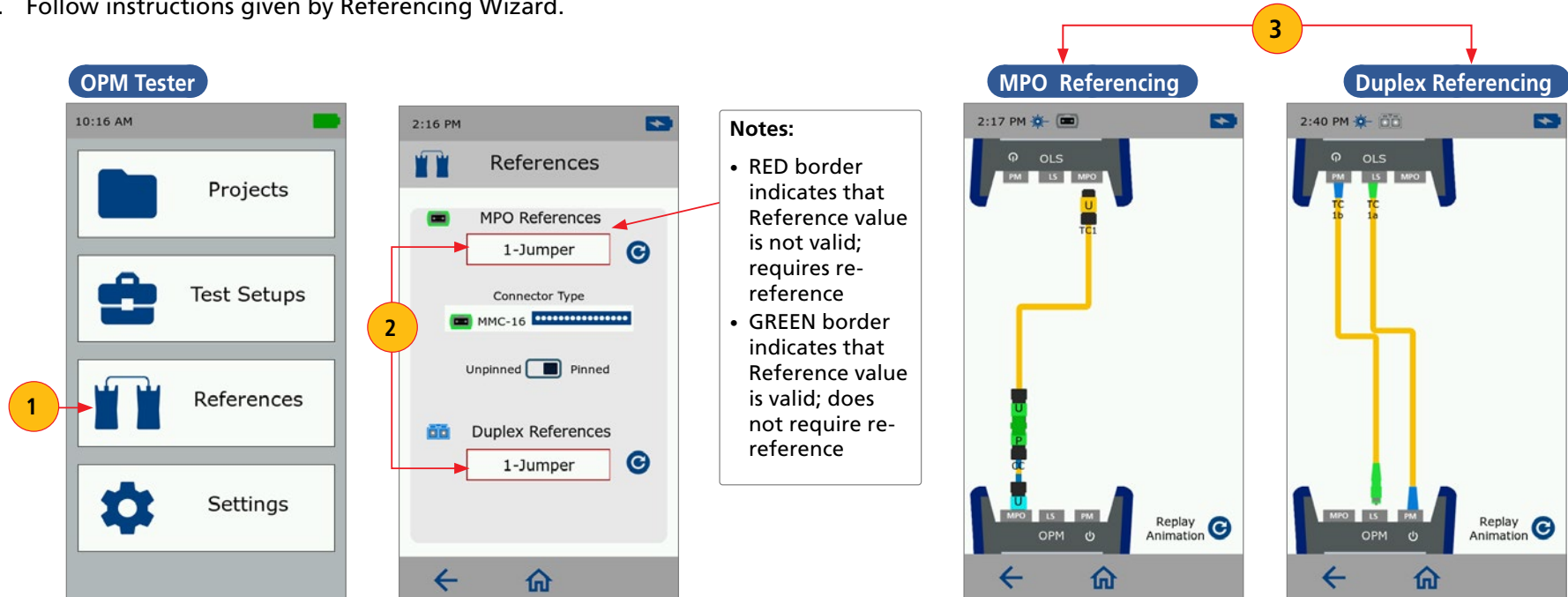
- No more than 24 hours after the previous reference
- If the MPO OLTS OLS tester is powered off
- If the test lead from the MPO OLTS OLS tester is disconnected at the OLS tester
- To comply with customer requirements (e.g. re-reference after every 500 tests)

Referencing (or re-referencing) is initiated from the FlowScout MPO OLTS - OPM tester.

1. From the FlowScout MPO OLTS Home screen, touch References.
2. From the Referencing screen, select either MPO or Duplex 1-Jumper Referencing method.

**Note:** 1-J Referencing method is preferred and specified in testing standards. Other options (e.g. 3-jumper, equipment, etc) will be available in future releases.

3. Follow instructions given by Referencing Wizard.



For details on MPO and Duplex referencing, see FlowSout MPO OLTS User's Guide



## Testing with FlowScout MPO OLTS

### Understanding the Workflow

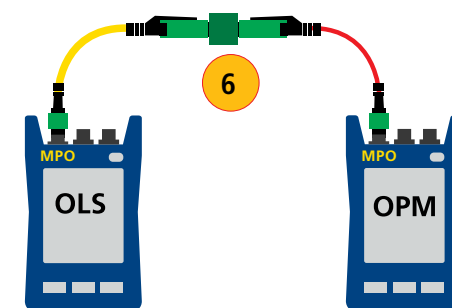
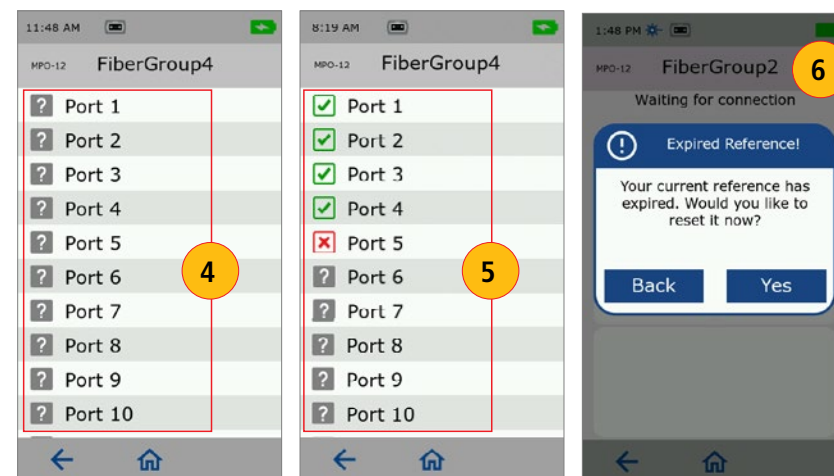
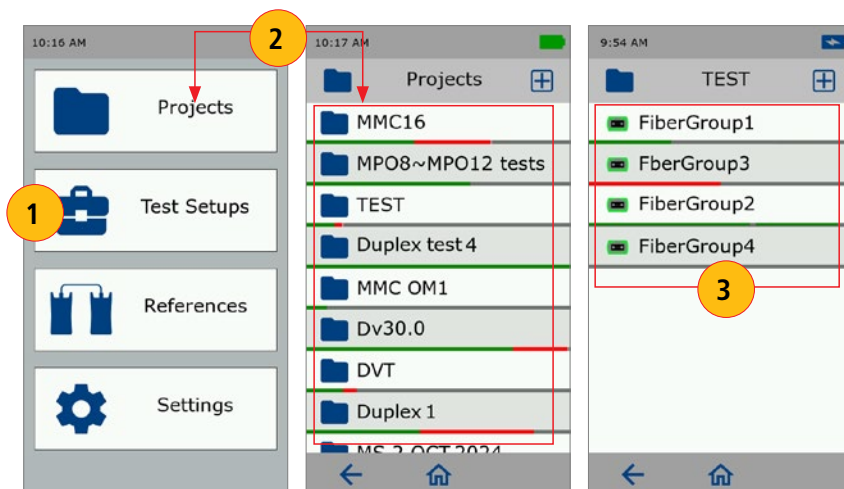
**Important:** Clean all fiber optic connectors before performing test procedures described below.

Setting references is recommended on a daily basis before testing and when changing test jumpers. If references haven't been set for over 24 hours, you will be prompted to set references. Once MPO | Duplex references have been set, you may proceed to testing.

#### On the OPM Tester

Testing is initiated from the OPM tester.

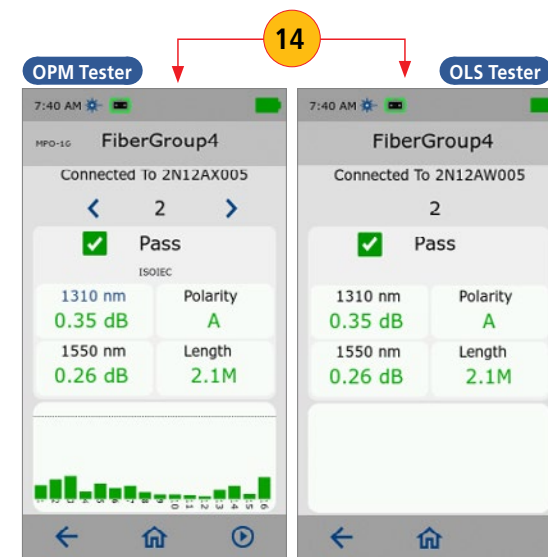
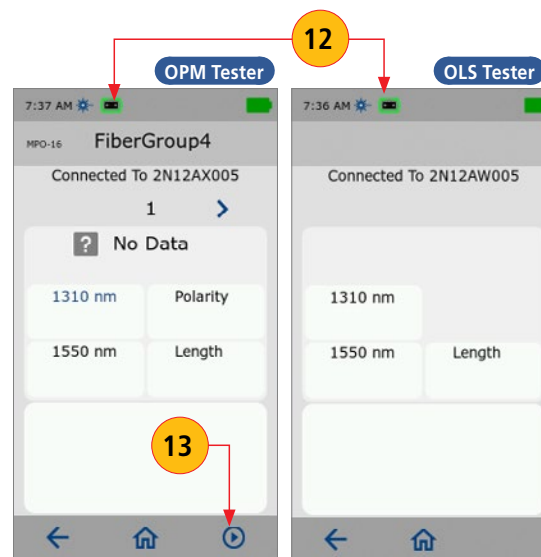
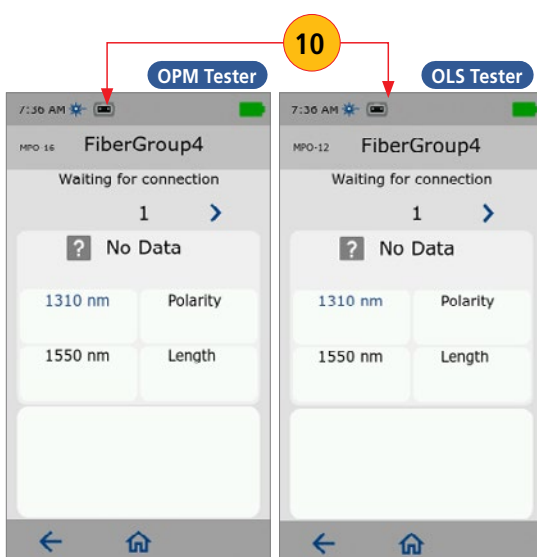
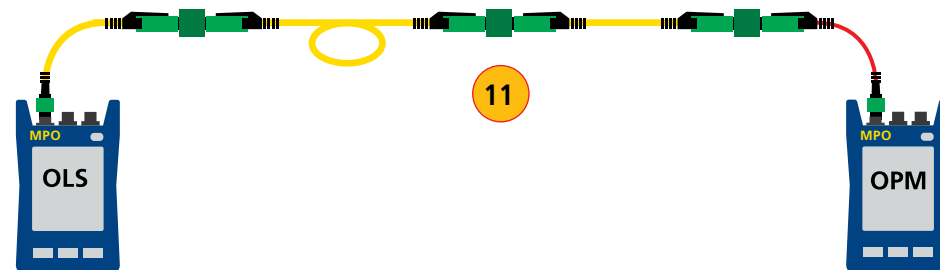
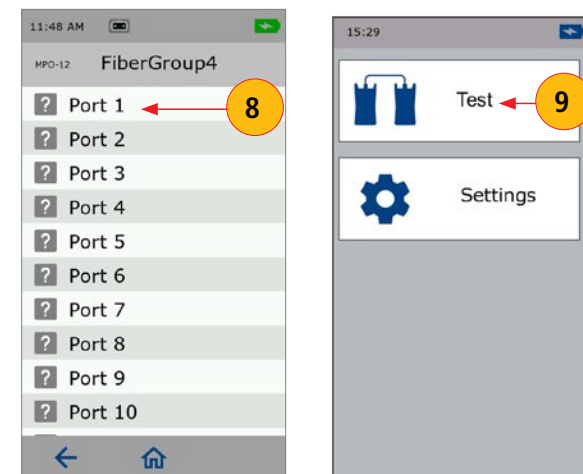
1. Select or create a Test Setup.  
See ["Configuring Test Setups" on page 18.](#)
2. Select or create a Project. See ["Creating New Projects" on page 14.](#)
3. Within the selected Project, select or create a Fiber Group. See sections ["Creating Fiber Groups" on page 15](#) and ["Copying a Fiber Group Setup" on page 17](#)
4. Display Fiber Group Status by touching its name. If the selected Fiber Group was not previously tested, Ports status will be displayed as - Not Tested.
5. If the selected Fiber Group was previously tested, Ports status may be indicated as Not Tested/Pass/Fail as follows:  
 - Not Tested   - Pass   - Fail
6. Ensure that you have valid references.
  - If references are not valid, See section ["Referencing" on page 20.](#)
  - For referencing you would need both testers at the same site.
7. Once a valid reference is established, move the OPM and OLS testers to opposite sites of the cable to be tested and proceed to testing.





### OPM and OLS Testers at opposite site of the cable under test

- Turn the OPM and OLS testers on.
  - Screen examples below show MPO testing images.
8. On the OPM tester Navigate to the desired Project > Fiber Group > Port. See steps 1-5. Touch the desired Port to initiate testing.
  9. On the OLS tester touch Test.
  10. Note that MPO icon is greyed out on both testers, which indicates that OPM and OLS testers are NOT connected to the cable under test.
  11. Connect both units to the cable to be tested.
  12. Note that MPO icons turn GREEN, with indicates that OPM and OLS testers ARE connected.
  13. On the OPM tester: touch test to start testing.
  14. Next, you should see test results displayed on both testers.



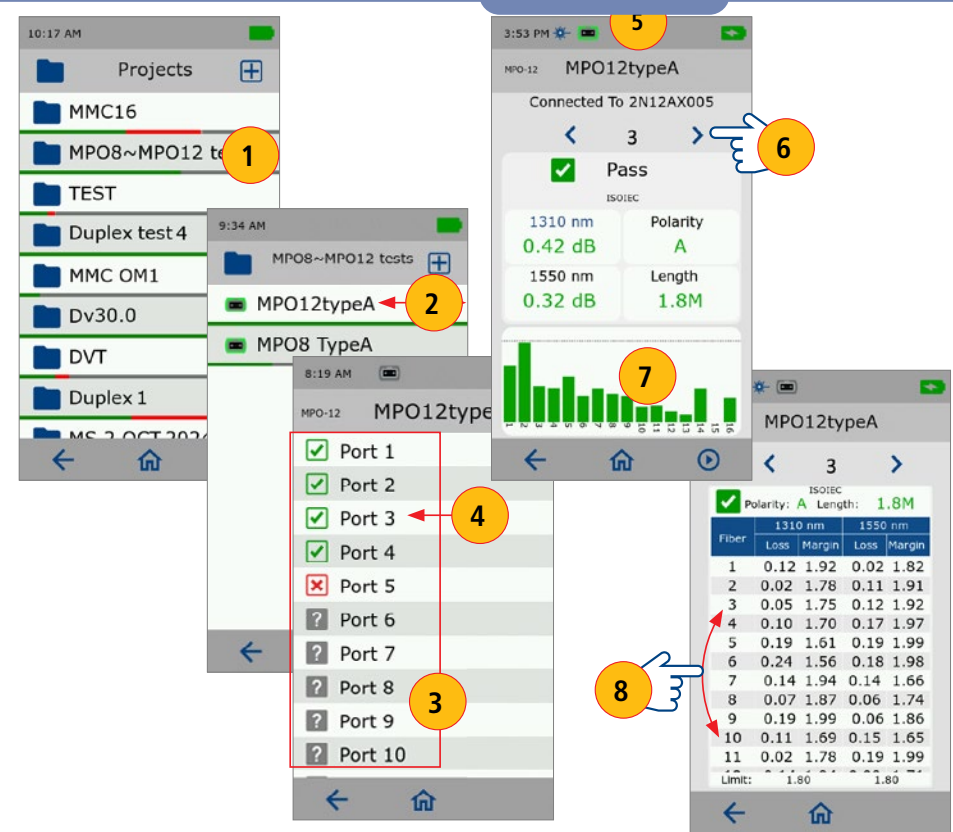


## Viewing Results on the OPM Tester

### Reviewing MPO Test Results (MPO Example)

#### On the OPM Tester

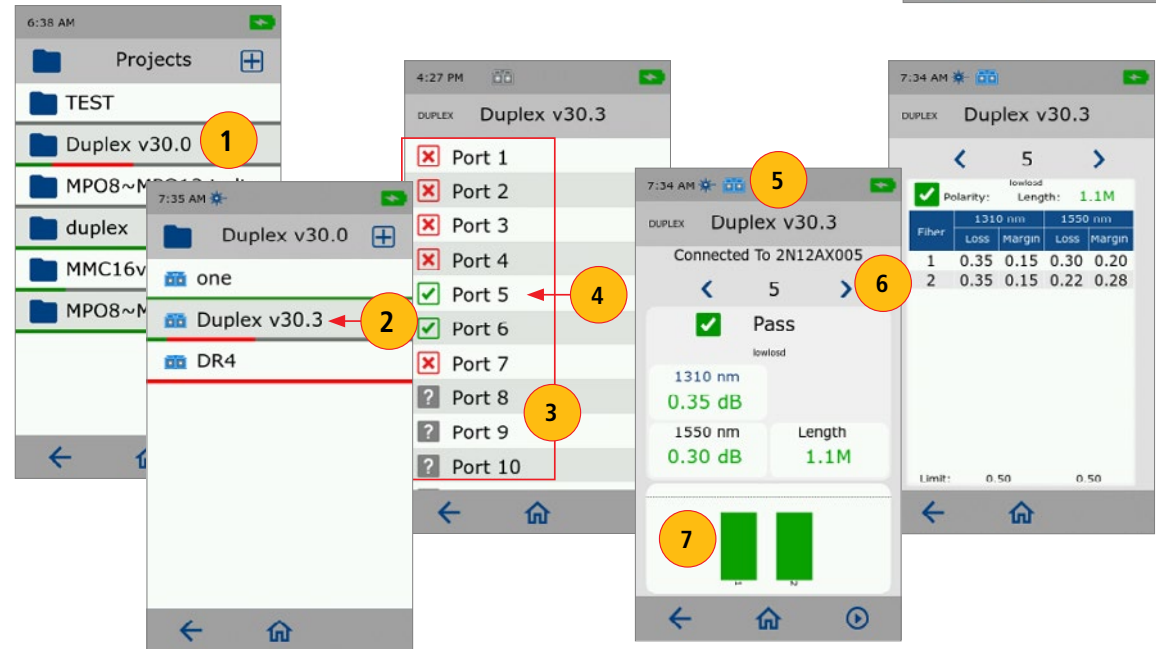
1. Select the desired Project > Fiber Group.
2. Tap on the selected Fiber Group name to display Ports test status.
3. Next, you will see the Ports status, which may be indicated as Pass/Fail/Not Tested as follows:  
☒ - Pass   ☒ - Fail   ☒ - Not Tested
4. Touch the desired Port to display Pass/Fail screen.
5. The displayed Pass/Fail screen indicates pass/fail, polarity, loss, and length data for the selected Port.
6. Tapping on the left/right arrows will display previous/next Port data.
7. Tap on the Loss graph to display the loss details for all fibers in the selected Fiber Group.
8. When in the Loss Details screen, scroll up/down to see all fibers.



### Reviewing Duplex Test Results (Duplex Example)

#### On the OPM Tester

1. Select the desired Project > Fiber Group.
2. Tap on the selected Fiber Group name to display Ports test status.
3. Next, you will see the Ports status, which may be indicated as Pass/Fail/Not Tested as follows:  
☒ - Pass   ☒ - Fail   ☒ - Not Tested
4. Touch the desired Port to display Pass/Fail screen.
5. The displayed Pass/Fail screen indicates pass/fail, loss, and length data for the selected Port.
6. Tapping on the left/right arrows will display previous/next Port data.
7. Tap on the Loss graph to display the loss details for all fibers in the selected Fiber Group.

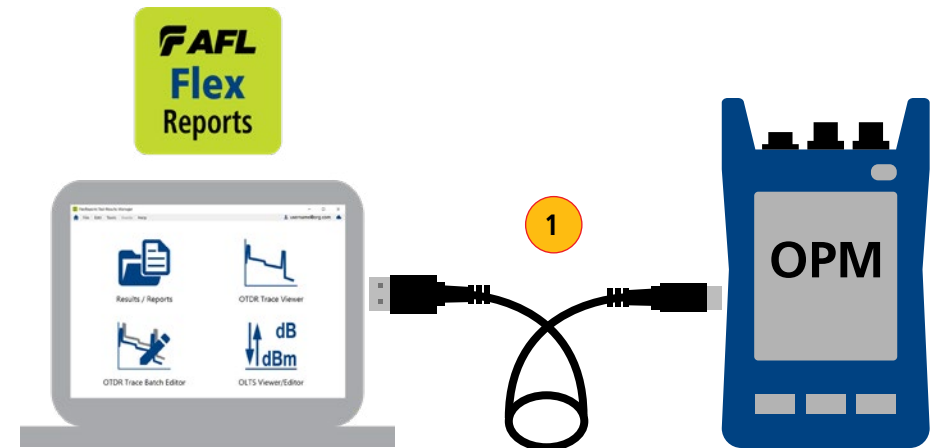




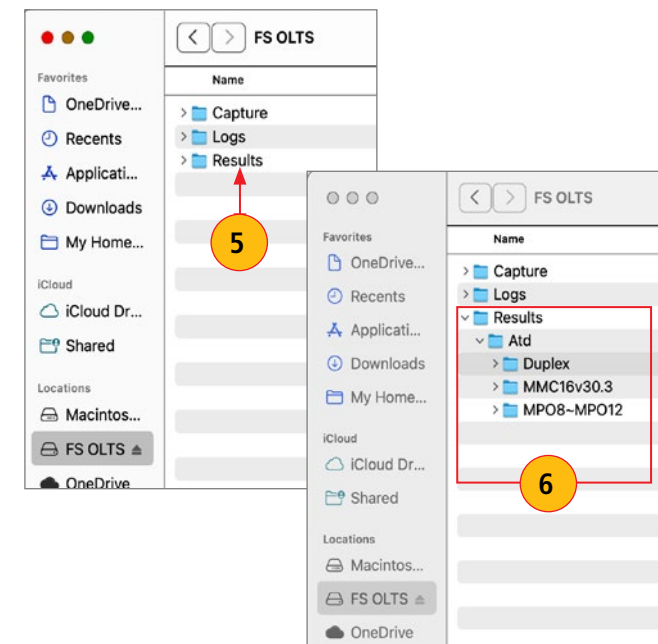
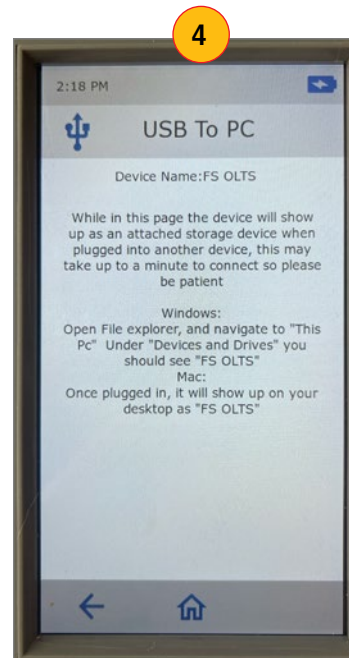
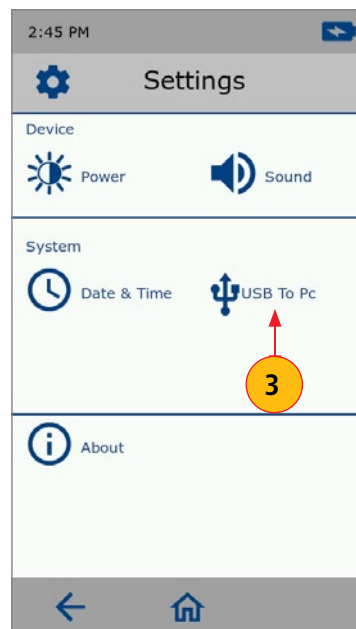
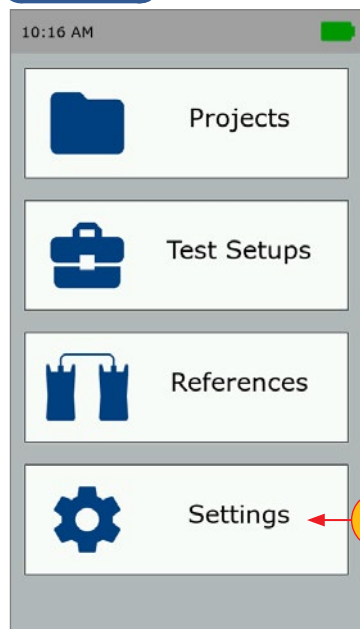
## Transferring Results to PC

Test results saved on the OPM tester may be transferred to a PC for further analysis and reporting with AFL's FlexRepos software.

1. Connect you OPM tester to a PC
2. On the OPM tester, tap Setting.
3. Next, tap the USB to PC option.
4. Next, you will see the instructions screen.
5. Once you see the FS OLTS appears on you PC, navigate to the Results folder; click to open.
6. You should see you Projects folders just like you created and stored then on the OPM tester.



### OPM Tester







## Generating Reports with FlexReporter Software Suite

**FlexReporter Software Suite** works with AFL Test and Inspection instruments to provide a simple-to-use, high performance cloud enabled reporting platform. FlexReporter combines FlexApp – a mobile App that wirelessly transfers test results to FlexReporter-Cloud from the field with a fast, comprehensive, 3-step reporting solution – FlexReports PC software. The FlexReporter software suite is developed to make the complicated task of reporting faster, simpler, and easy-to-use.

**FlexReports** is a Windows®-compatible PC software that provides comprehensive test results analysis and reporting for AFL FlexScan OTDRs, FOCIS inspection systems, OLTS, and OPM products.

**FlexApp** is a mobile Android and iOS App that supports AFL's FlexScan® OTDRs and FOCIS connector inspection products (FOCIS Flex, FOCIS Lightning). FlexApp wirelessly transfers test results from any FlexScan OTDR or FOCIS inspection probe directly to FlexReporter-Cloud from the field for subsequent analysis, editing, and reports generation with FlexReports PC software.

### Using FlexReports for Downloading Test Results from FlexReporter-Cloud

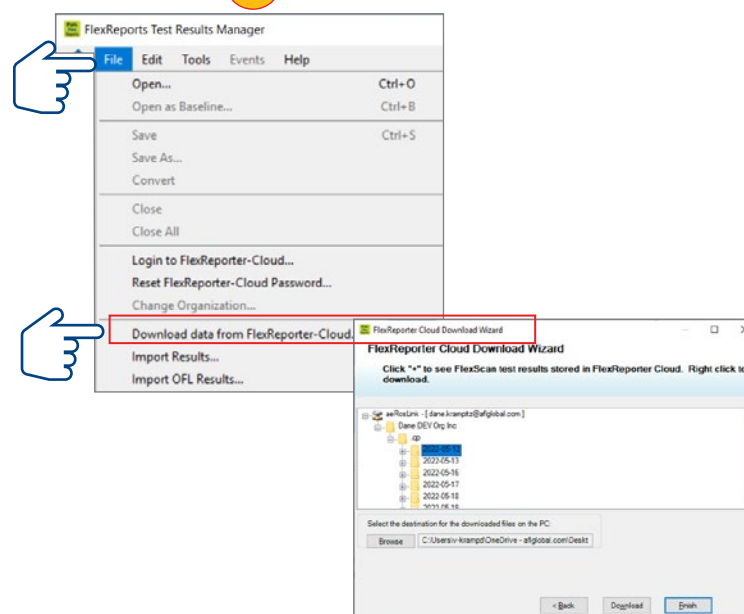
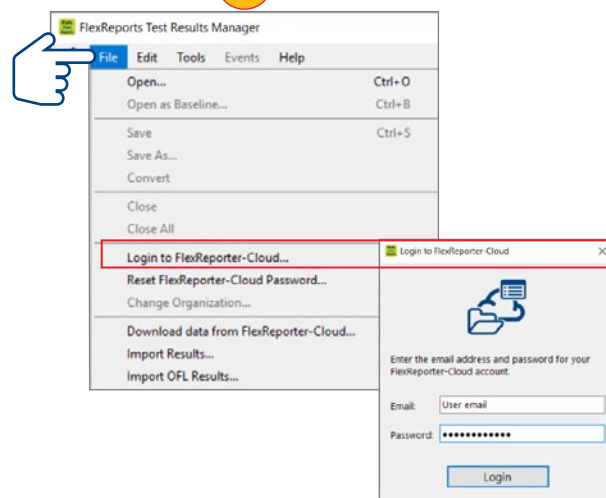
1. Install and run latest version of FlexReporter.
2. From FlexReports Home screen menu, click File and click "Log in to FlexReporter-Cloud" to log in.
3. Click "Download data from FlexReporter-Cloud". Navigate and select the desired folder with results for download, then click "Download".
4. Return to the FlexReports Home Menu to view results or generate a test report.

1

2

3

#### Download FlexReports



## Generating Reports

See [FlexReports User's Guide](#) for detailed explanation.



## Contacts

Technical Support	<a href="mailto:AFLtesttechsupport@AFLglobal.com">AFLtesttechsupport@AFLglobal.com</a> +1 (800) 235-3423 (Option 3)
Sales Support	<a href="https://www.aflglobal.com/en/Contact/Product-Sales-Team">https://www.aflglobal.com/en/Contact/Product-Sales-Team</a> <a href="mailto:Sales@AFLglobal.com">Sales@AFLglobal.com</a> +1 (800) 235-3423 (Option 4)
Purchase Orders, Quote, RMA	<a href="mailto:SPBCustomerPO@AFLglobal.com">SPBCustomerPO@AFLglobal.com</a>
Service Request	<a href="mailto:AFLEquipmentService@AFLglobal.com">AFLEquipmentService@AFLglobal.com</a> <a href="#">Product Service Request Form</a> +1-800-235-3423 (Option 2)
AFL Test & Inspection web	<a href="https://www.aflglobal.com/en/Products/Test-and-Inspection">https://www.aflglobal.com/en/Products/Test-and-Inspection</a>
Product Registration	<a href="http://www.AFLglobal.com/Register">www.AFLglobal.com/Register</a>
AFL's Customer Portal - Direct	<a href="http://content.AFLglobal.com/Direct.html">content.AFLglobal.com/Direct.html</a>