QUICK CARD

Measuring Power Levels at the ONT

This quick card describes how to connect to a fiber under test, configure FTTx settings, and read power measurements with the VIAVI OLP-87 NG-PON2 selective power meter.

EQUIPMENT REQUIREMENTS

► SmartClass Fiber OLP-87 NG-PON2 Wavelength Selective Power Meter with SW V20.20.06 or greater

► P5000i Fiber Microscope (recommended)

► Fiber optic cleaning tool

► Two (2) SC APC Patch Cords

Figure 1: Equipment Requirements

FIBER INSPECTION GUIDELINES

► Clean both sides of every connection point (bulkhead connectors, patch cords, and OLP-87 ports) prior to connections. If equipped, use the P5000i Fiber Microscope to test the end-faces.

► Focus fiber on the screen. If dirty, clean the end-face.

► If it appears clean, run inspection test.

► If it fails, clean the fiber and re-run inspection test. Repeat until it passes.

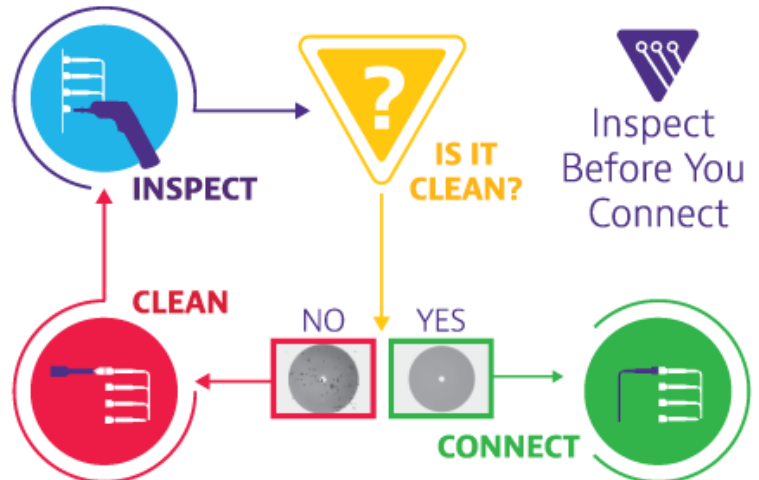| Connection Type	Inspection Tip
SC-APC Bulkhead	
SC-APC Patch Cord	

Figure 2: P5000i Fiber Inspection Microscope

Figure 3: Inspect Before You Connect

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CONNECT TO FIBER UNDER TEST (FUT)

The OLP-87 should be connected between the OLT and ONT at the ONT as follows:

1. Connect an SC APC patch cord between the OLP-87 OLT connector and the OLT.

2. Connect an SC APC patch cord between the OLP-87 ONT connector and the ONT.

to OLT   to ONT

Figure 4: OL-87, Top View (Power Meter Connectors)

Figure 5: Through Mode testing

CONFIGURE TEST SETTINGS

NGPON2 Power Meter icon

Probe icon

Menu button

Home Button

Back button

Power Button

Figure 6:OLP-87, Front View

1. Press the **Home** button to show the Home Screen.
2. Tap the **NGPON2** icon.
3. Press the **Menu** button.
4. Tap the **More** soft key.
5. Tap **Pass/Fail DS Channel Selection** and set which channels are activated for Pass/Fail testing.
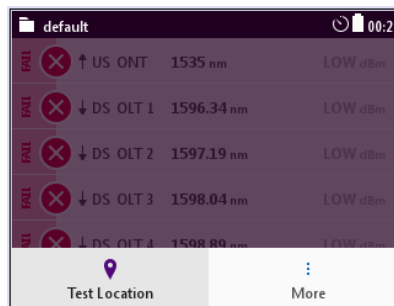6. Press the **Back** button twice to return to NGPON2 Test Results.

Figure 7: Menu Screen

Figure 8: Select Channels

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7. Tap the **Menu** button

8. Tap the Test Location soft key and and set Location:

   ▪ Select **FDH** if testing at the Fiber Distribution Hub.

   ▪ Select **FDT** if testing at the Fiber Distribution Terminal.

   ▪ Select **ONT** if testing at the Home or Business.

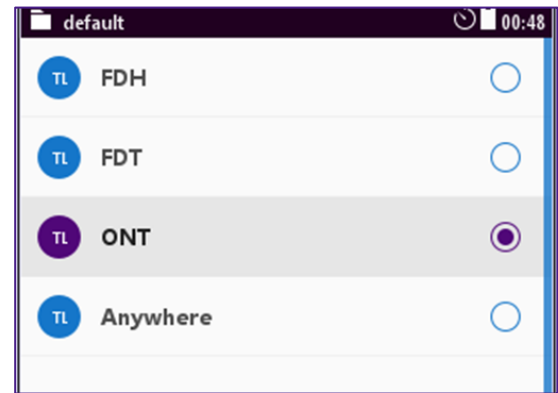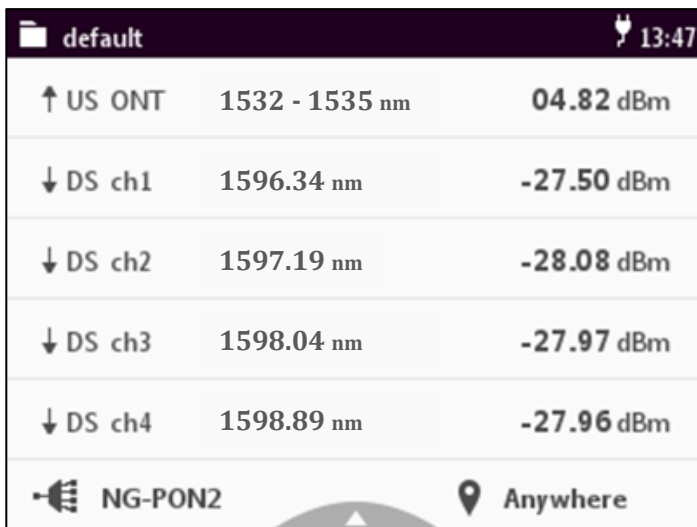   ▪ Select **Anywhere** to disable Pass/Fail Analysis and Channel Selection.

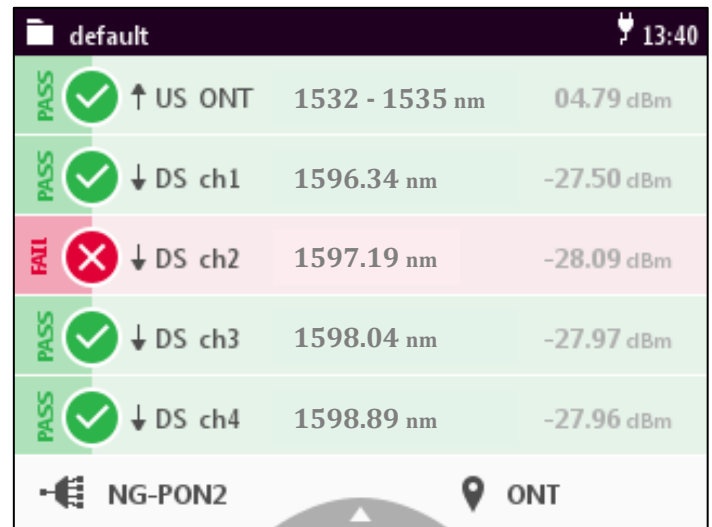*Figure 9: Select Test Location*

MEASURE POWER LEVELS

Read Power Measurements and Status:

➢ 1535nm is the Upstream channel from the ONT.

➢ 1596.34nm, 1597.19nm, 1598.04nm, and 1598.89nm are the Downstream channels from the OLT.

Figure 10: Test Results Example, Location = Anywhere, no Pass/Fail Analysis

Figure 11: Test Results Example, Location = ONT

Contact Us

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