Quick Card

**SmartClass Fiber OLP-87 PON Power Meter**
**Measuring FTTx/PON Power Levels**

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

**Equipment Requirements:**
- SmartClass Fiber PON Power Meter:
  - OLP-87
  - OLP-87P (includes Patch Cord Microscope)
- P5000i Fiber Microscope
- Fiber optic cleaning tool
- Two (2) SC APC Patch Cords

**Fiber Inspection Guidelines:**
Inspect & clean (if necessary) both sides of every connection being used (bulkhead connectors, patch cords, and OLP-87 ports) prior to reconnection for each test, using the P5000i or optional Patch Cord Microscope. OLP-87 SC APC ports must be clean, or results will be inaccurate and ports possibly damaged:

1. Connect the **P5000i** into the USB device port on the **OLP-87**.
2. Press the **Power button** to turn on the **OLP-87**.
3. Tap the **Inspect** icon on the **Home** screen.
4. Focus the live fiber image on the screen using the **P5000i’s Focus Control** knob.
5. If dirty, clean the connector.
6. If it appears clean, run the inspection test.
7. If it fails, clean fiber and re-run inspection test. Repeat until it passes.
Connect to Fiber Under Test (FUT) and measure power levels:
All fibers and connectors should be cleaned and inspected prior to connection, as described on page 1. The OLP-87 should be connected between the OLT and ONT at the ONT as follows:

1. Connect an APC patch cord between the OLP-87 OLT connector and the OLT.
2. Connect an APC patch cord between the OLP-87 ONT connector and the ONT.
3. Tap the Home button to display the Home Screen.
4. Tap the PON Meter icon.
5. Tap the Menu button and set Location to Anywhere.
6. Read the Power Measurements:
   - 1310nm is the Upstream power from the ONT
   - 1490nm is the Downstream power from the OLT
   - 1550nm is the Video RF power from the OLT.