VIAVI Solutions

Quick Card

SmartPocket OLS-3x
Optical Light Source

This quick card describes how to use the VIAVI SmartPocket OLS-34, OLS-35, or OLS-36 as an Optical Light Source (OLS). An Optical Power Meter (OPM) should be referenced to the OLS before testing for Optical Insertion Loss. Refer to the OPM quick card for instructions.

Equipment Requirements:

- Optical Light Source:
  - OLS-34 (Multimode 850/1300 nm),
  - OLS-35 (Single mode 1310/1550 nm), or
  - OLS-36 (Multimode 850/1300 nm and Single mode 1310/1550 nm)
- Fiber optic inspection and cleaning tools
- Jumper cable (Reference Cable) with connectors matching the optical port on the OLS and the Fiber Under Test (FUT)
- Optical Coupler to connect Reference Cable to FUT

The following information is required to complete the test:

- Type of Fiber (Multimode or Single Mode)
- Type of Connectors on OLS and FUT (SC UPC, SC APC, LC UPC, etc.)
- Wavelength(s) to be tested (850nm, 1300 nm, 1310 nm, or 1550 nm)

Connect to Fiber Under Test (FUT):

The OLS may be connected to the FUT via an optical patch panel (OPP) or an optical coupler as follows:

1. Inspect and, if necessary, clean the optical port on top of the OLS.
2. If the interface to the Fiber under Test (FUT) is a patch cord, connect the patch cord to an optical coupler with the same connector type.
3. Inspect and, if necessary, clean the FUT connected to the coupler or OPP.
4. Inspect and, if necessary, clean a fiber end face of the Reference Cable.
5. Connect the Reference Cable to the optical port of the OLS.
6. Inspect and, if necessary, clean the other fiber end face of the Reference Cable.
7. Connect the Reference Cable to the coupler or OPP.

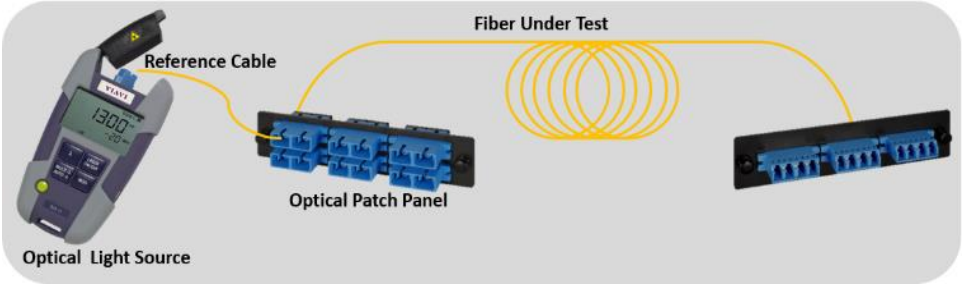

Figure 1: Connecting OLS to OPP or coupler

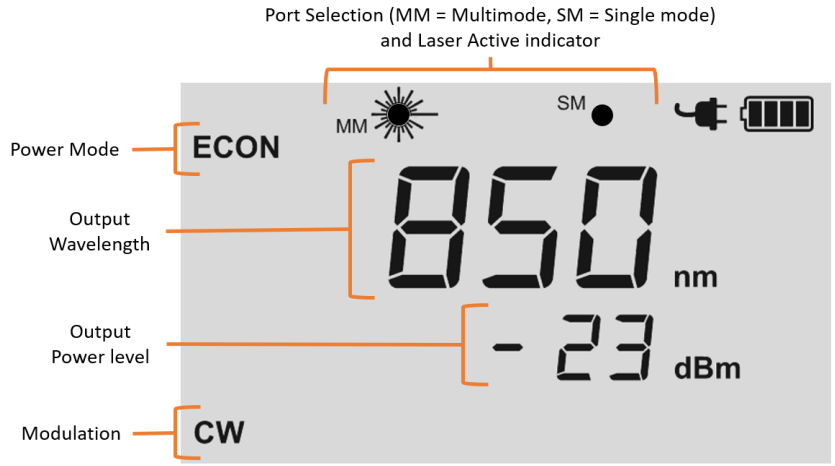

Figure 2: OLS Measurement Display

Operate the Light Source:

1.  Press the green **Power** button to turn on the OLS.

2.  If using the OLS-36, press and hold the **Port/λ** key to select the desired Port (MM for Multimode, SM for Single mode).

3.  Press the **MOD** key to select **CW** (Continuous Wave) modulation.

4.  Press the **ON/OFF** key to turn the laser on. The Laser Active Indicator  is displayed.

5.  Press the **λ** key to select the desired output Wavelength (1310nm, 1550nm, 850nm, or 1300nm).

6. Repeat Step 5 for all wavelengths to be tested.

7.  After the test, press the **ON/OFF** key to turn the laser off.

8. Disconnect the Reference Cable from the coupler or OPP. Do not disconnect the Reference Cable from the OLS port or power off the OLS until all testing is complete.