



OPTICAL VECTOR ANALYZER-EXTERNAL LASER



OVA-EL

The Luna OVA, the industry's first single-scan, self-calibrating solution for all-parameter characterization of passive optical components, is now available with optional external laser.

Imagine

Development and production costs, as well as time to market, for passive optical components and modules reduced by 60%!
Luna's OVA-EL completely characterizes passive optical components and assemblies with breakthrough speed, all with a single sweep of an external tunable laser source.

- Insertion Loss (IL),
- Polarization Dependent Loss (PDL),
- Group Delay (GD),
- Chromatic Dispersion (CD),
- Polarization Mode Dispersion (PMD),
- Optical Time Domain Windowing,
- Jones Matrix elements and
- Optical Phase Response

...and more across the S, C and L bands in one test instrument!

NEW! External Laser Capability...Agilent 81640 (A/B) and 81600 series TLS!

The **OVA** is now available in an external laser version.
Compatible with the Agilent 81640(A/B)/81600 series tunable laser sources, the **OVA-EL** maintains the same high level of performance and accuracy delivered by the Optical Vector Analyzer family at a very competitive price.





OVA-EL Specifications

(after one hour warm-up at 20 °C)

| Parameter | Specification | Units |
|--|---------------|---------|
| Measurement performance | | |
| Wavelength range ¹ : | 1520-1620 | nm |
| Wavelength: | | |
| Standard Resolution | 3.2 | pm |
| High Resolution | 1.6 | pm |
| Accuracy ² | ± 0.015nm | pm |
| Repeatability ² | ± 0.5pm | pm |
| Optical phase error | ± 0.01 | radians |
| Insertion loss characteristics ³ : | | |
| Dynamic range | 60 | dB |
| Ripple | ± 0.02 | dB |
| Resolution | ± 0.01 | dB |
| Accuracy | ± 0.05 | dB |
| Chromatic dispersion ³ : | | |
| Accuracy | ± 5 | ps/nm |
| Group delay: | | |
| Range ⁴ | 3 or 6 | ns |
| Accuracy ³ | ± 0.1 | ps |
| PMD: | | |
| Range ⁴ | 3 or 6 | ns |
| Accuracy ³ | ± 0.15 | ps |
| PDL: | | |
| Extinction ratio | 35 | dB |
| Accuracy ³ | ± 0.05 | dB |
| Measurement Timing: | | |
| Laser sweep rate | 40 | nm/s |
| All-parameter measurement rate ⁵ | 350 | ms/nm |
| Typical measurement time ⁶ | 50 | s |
| Maximum device length (including leads) ⁷ | 30 | meters |

¹ Outside of this range, specifications are not guaranteed.

² Represents "typical" performance of compatible laser sources. For laser wavelength calibration, consult your tunable laser manufacturer.

³ Measured using 40 averaged calibration scans, 64 averaged measurement scans, 30 pm resolution bandwidth, on a 4 m standard single mode fiber patch cord (and NIST certified artifacts for PMD and PDL).

⁴ Specifies the total device impulse-response duration that may be captured.

⁵ Combined laser sweep and analysis time per scan.

⁶ Measurement with full specification (see note 2) over 2 nm range. Excludes calibration time.

⁷ In transmission mode.