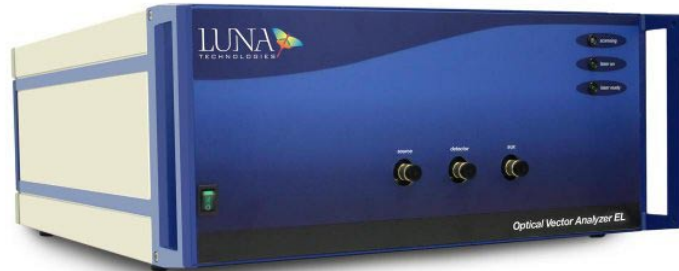




## OPTICAL VECTOR ANALYZER-EXTERNAL LASER



### 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   |
|--|---------------|---------|
| <b>Measurement performance</b>                       |               |         |
| Wavelength range <sup>1</sup> :                      | 1520-1620     | nm      |
| Wavelength:  |               |         |
| Standard Resolution                                  | 3.2           | pm      |
| High Resolution                                      | 1.6           | pm      |
| Accuracy <sup>2</sup>                                | ± 1.5         | pm      |
| Repeatability  | ± 0.1         | pm      |
| Optical phase error                                  | ± 0.01        | radians |
| Insertion loss characteristics <sup>3</sup> :        |               |         |
| Dynamic range  | 60            | dB      |
| Ripple   | ± 0.02        | dB      |
| Resolution   | ± 0.01        | dB      |
| Accuracy   | ± 0.05        | dB      |
| Chromatic dispersion <sup>3</sup> :                  |               |         |
| Accuracy   | ± 5           | ps/nm   |
| Group delay:   |               |         |
| Range <sup>4</sup>                                   | 3 or 6        | ns      |
| Accuracy <sup>3</sup>                                | ± 0.1         | ps      |
| PMD:   |               |         |
| Range <sup>4</sup>                                   | 3 or 6        | ns      |
| Accuracy <sup>3</sup>                                | ± 0.15        | ps      |
| PDL:   |               |         |
| Extinction ratio                                     | 35            | dB      |
| Accuracy <sup>3</sup>                                | ± 0.05        | dB      |
| Measurement Timing:                                  |               |         |
| Laser sweep rate                                     | 40            | nm/s    |
| All-parameter measurement rate <sup>5</sup>          | 350           | ms/nm   |
| Typical measurement time <sup>6</sup>                | 50            | s       |
| Maximum device length (including leads) <sup>7</sup> | 30            | meters  |

<sup>1</sup> Outside of this range, specifications are not guaranteed.

<sup>2</sup> Accuracy maintained by an internal NIST traceable HCN gas cell.

<sup>3</sup> 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).

<sup>4</sup> Specifies the total device impulse-response duration that may be captured.

<sup>5</sup> Combined laser sweep and analysis time per scan.

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

<sup>7</sup> In transmission mode.