

Breakthrough Functionality in Fiber Optic Testing



OPTICAL VECTOR ANALYZER (Model OVA™ LP)

KEY FEATURES AND PRODUCT HIGHLIGHTS

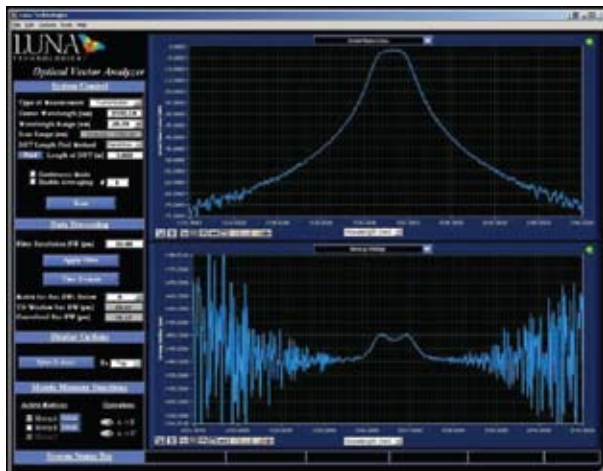
- **Investment Protection:** With the OVA™ LP, you can cost **effectively** invest in a Luna solution today for IL/PDL/PMD, and upgrade the OVA™ LP as your testing needs expand.
- **Industry Standard:** The Jones Matrix Eigenanalysis method used by the OVA™ LP is the industry standard for measuring PMD and DGD.
- **Industry Leading Accuracy:** The OVA™ LP has the highest accuracy in the industry; all with a single sweep of the laser.
- **Best in Class Dynamic Range:** Recognized across the industry as the leading tool for making component and system level polarization dependent measurements with dynamic range in excess of 60 dB.

Luna Technologies' **OPTICAL VECTOR ANALYZER (OVA™) LP**

is the fastest, most accurate and economical tool for loss and polarization measurements of modern optical networking equipment. Based on Luna's award winning OVA™ CTe, the OVA™ LP is the ideal tool for loss and polarization measurements of fiber components.

With the OVA™ LP, production cost, development cost, and time to market for passive optical components and modules can be reduced by up to sixty percent. Luna's OVA™ LP characterizes passive optical components with industry-leading speed and accuracy. With a single sweep of an internal tunable laser, the OVA™ LP measures:

- Insertion Loss (IL)
- Polarization Dependent Loss (PDL)
- Polarization Mode Dispersion (PMD) / Differential Group Delay (DGD)
- 2nd Order PMD
- Optical Time Domain response
- Jones Matrix elements



Luna's OVA™ LP is the next-generation optical component spectrum analyzer.

www.lunatechnologies.com

3157 State Street | Blacksburg, VA 24060
1.540.961.5190 | Fax: 1.540.961.5191
solutions@lunatechnologies.com
Support phone: 1.866.586.2682

OVA™ LP

| PARAMETER | FAST MODE | AVERAGING MODE | UNITS |
|----------------------------------------------------|----------------------|----------------|-----------------|
| Wavelength Range: | 1525-1605 | 1525-1605 | nm |
| Wavelength: | | | |
| Standard Resolution | 3.2 | 3.2 | pm |
| High Resolution | 1.6 | 1.6 | pm |
| Accuracy ¹ | ± 1.5 | ± 1.5 | pm |
| Repeatability | ± 0.1 | ± 0.1 | pm |
| Insertion Loss Characteristics²: | | | |
| Dynamic range ⁶ | 60 | 90 | dB |
| Ripple | ± 0.05 | ± 0.01 | dB |
| Resolution | ± 0.05 | ± 0.002 | dB |
| Insertion Loss Accuracy | ± 0.1 | ± 0.05 | dB |
| PMD: | | | |
| Range ³ | 3 or 6 | 3 or 6 | ns |
| Accuracy ² – 1st Order | ± 0.03 (100pm steps) | | |
| | ± 0.15 (30pm steps) | ± 0.06 | ps |
| Accuracy ² – 2nd Order | ± 10 | ± 2 | ps ² |
| PDL: | | | |
| Extinction ratio | 40 | 50 | dB |
| Accuracy ² | ± 0.05 | ± 0.03 | dB |
| Measurement Timing: | | | |
| Laser sweep rate | 70 | 70 | nm/s |
| All-parameter measurement rate ⁴ | 55 | 55 | ms/nm |
| Fully specified measurement time ⁵ | 12 | 12 | s |
| Maximum Device Length (including leads) | 30 | 30 | meters |

- Accuracy maintained by internal NIST-traceable HCN gas cell
- Fast Mode: no averaged calibration scans, 4 averaged measurement scans, 30 pm resolution bandwidth, 8 m device length. Averaging Mode: 4 averaged calibration scans, 64 averaged measurement scans, 30 pm resolution bandwidth, 8 m device length.
- Specifies the total device impulse-response duration that may be captured
- Combined laser sweep and analysis time per scan
- Measurement with full specification over Fast Mode: 40 nm range, and Averaging Mode: 2.5 nm range. Excludes calibration time.
- 90, 60 and 50 dB dynamic ranges in 'Averaging Mode' for IL, GD and PMD are with the "High Dynamic Range Averaging" option installed and enabled.