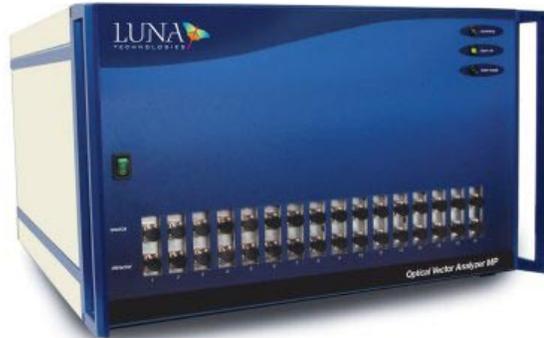




OPTICAL VECTOR ANALYZER MULTI-PORT



OVA-MP

The industry's first completely integrated single-scan, self-calibrating solution for all-parameter characterization of multi-channel passive optical components and modules

All Parameter, Multi-Port Testing

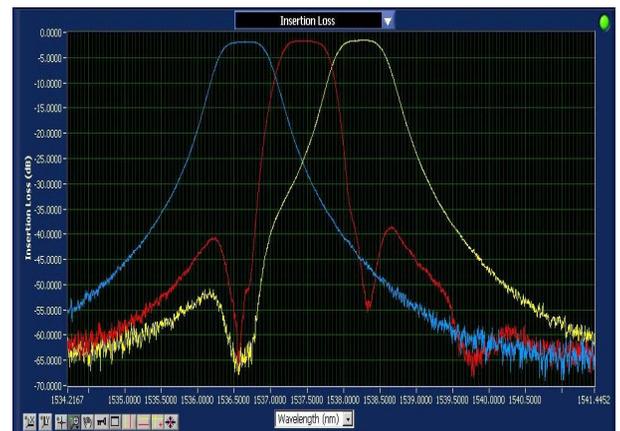
Luna's **OVA-MP** characterizes multi-channel passive optical components with industry-leading speed and accuracy. The OVA-MP provides more thorough testing in less time by leveraging Luna's proprietary interferometric all-parameter analysis technique which provides unprecedented speed, accuracy and integration in optical component test. Luna's patented single-scan technique provides **instant access** to

- 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

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

NEW! 128 port capability and auto internal calibration

The **OVA** is now available with multiple testing ports. Configurable up to 128 1xM or NxN ports, the **OVA MP** maintains the same high level of performance and accuracy that delivered by the Optical Vector Analyzer family with extended capability for volume all-parameter testing applications.





OVA-MP Specifications

(after one hour warm-up at 20 °C)

Parameter	Specification	Units
Measurement performance		
Number of Measurement Ports ¹ :	up to 128	
Wavelength range ² :	1520-1620	nm
Wavelength:		
Standard Resolution	3.2	pm
High Resolution	1.6	pm
Accuracy ³	± 1.5	pm
Repeatability	± 0.1	pm
Optical phase error	± 0.01	radians
Insertion loss characteristics ⁴ :		
Dynamic range	60	dB
Ripple	± 0.02	dB
Resolution	± 0.01	dB
Accuracy	± 0.05	dB
Chromatic dispersion ⁴ :		
Accuracy	± 5	ps/nm
Group delay:		
Range ⁵	3 or 6	ns
Accuracy ⁴	± 0.1	ps
PMD:		
Range ⁵	3 or 6	ns
Accuracy ⁴	± 0.15	ps
PDL:		
Extinction ratio	35	dB
Accuracy ⁴	± 0.05	dB
Measurement Timing:		
Laser sweep rate	40	nm/s
All-parameter measurement rate ⁶	350	ms/nm
Typical measurement time ⁷	50	s
Maximum device length (including leads) ⁸	30	meters

¹ Configurable as 1xM or NxN in increments of 16.

² Outside of this range, specifications are not guaranteed.

³ Accuracy maintained by an internal NIST traceable HCN gas cell.

⁴ Measured using 20 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).

⁵ Specifies the total device impulse-response duration that may be captured.

⁶ Combined laser sweep and analysis time per scan.

⁷ Per port with full specification (see note 2) over 2 nm range. Excludes calibration time.

⁸ For 1 nm scan range.

⁹ In transmission mode.