

## OPTICAL FREQUENCY DOMAIN REFLECTOMETER SOFTWARE

The Optical Frequency Domain Reflectometer (OFDR) Software is an upgrade option to Luna's Optical Vector Analyzer™ (OVA) 5000 system. It configures the OVA 5000 into a high resolution reflectometer further extending the utility of the instrument. OFDR makes finding faults in fiber optic and PLC components and assemblies quick and easy.

The OFDR provides isolation of faults and problems well before final test, saving hours in rework and hard dollars in yield loss. Check interfaces introduced by multiple bonds, lenses and filters and discover the solutions to processing errors before they become problems.

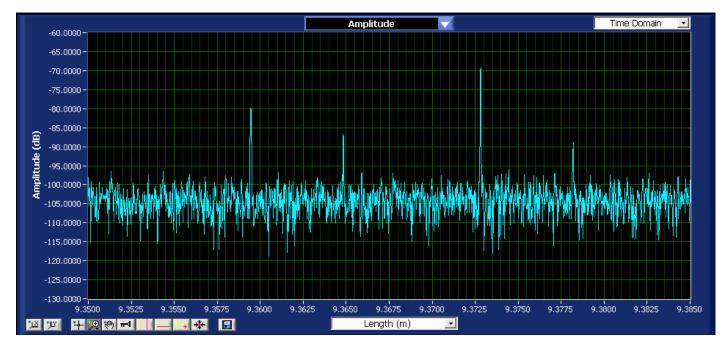
With 20 micron spatial resolution, zero dead-zone, 75 meter device length and a user friendly graphical user interface, the OFDR option provides a highly sensitive tool for troubleshooting your networks, components, and assemblies. Discover what you've been missing and what Luna's OFDR can do for you.



**OVA 5000** 

## **KEY FEATURES AND PRODUCT HIGHLIGHTS**

- Measure IL, RL, and GD
- Isolate effects of each device in the optical path
- Determine sources of ripple and loss
- Zero dead-zone
- 75 meter maximum device length
- 20 micron two-point resolution
- >95 dB sensitivity



OFDR measurement of a fiber optic switch. The four reflections (due to the input fiber, prism and output fiber) are easily visible with greater than 95 dB sensitivity and 20 micron spatial resolution



PARAMETER		UNITS
Wavelength Range:		
	1265-1335 or 1525-1610	nm
Wavelength:		
Resolution <sup>1</sup>	0.02	pm
Accuracy <sup>2</sup>	±1.5	pm
Spatial Resolution (zero dead zone) <sup>3</sup>		
Two-point resolution	20	microns
Integrated Return Loss Characteristics:		
Dynamic range	60	dB
Sensitivity	95	dB
Ripple	±0.05	dB
Resolution	±0.02	dB
Accuracy	±0.15	dB
Group Delay:		
Range <sup>3</sup>	350	ns
Accuracy	±0.25	ps
Measurement Timing:		
Laser sweep rate	70	nm/s
40nm range <sup>4</sup>	< 25.0	s
Maximum Device Length (including leads	s):	
Transmission	150	meters
Reflection	75	meters
Physical		
Weight (Processor not Included)	16.24 35.8	kg Ibs
Case Size (W X D X H)	473 X 420 X 206 18.62 X 16.54 X 8.08	mm inches

- 1 Determined by width of time domain window.
- 2 Maintained by internal NIST-traceable HCN gas cell.
- 3 Over entire 150m in transmission and 75m in reflection.
- 4 Combined laser sweep and analysis time per scan.

CLASS 1 LASER PRODUCT