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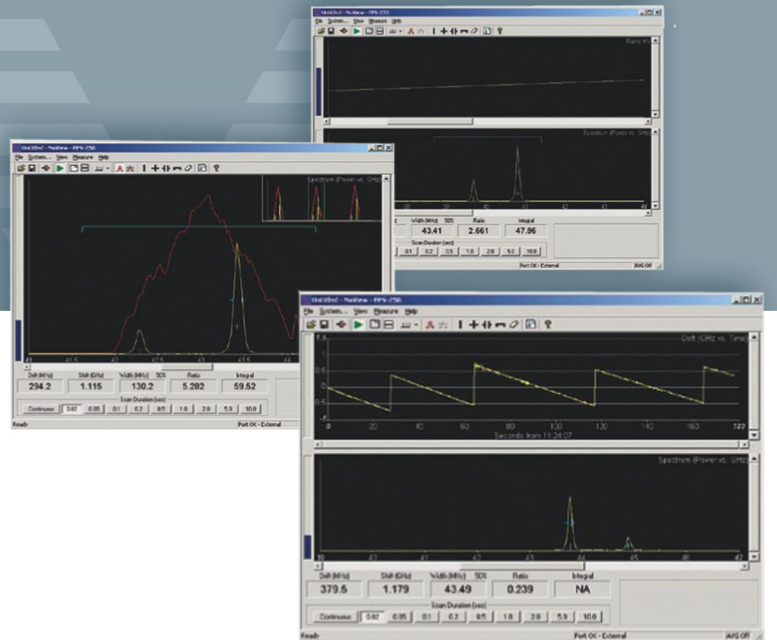
NUVIEW LASER SPECTRAL ANALYSIS SOFTWARE

FPS-250

R&D AND MANUFACTURING

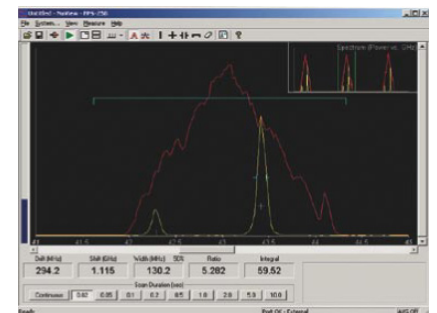
Completely automatic laser spectral analysis

- Most convenient measurement of laser linewidth, longitudinal mode separation, frequency stability and jitter
- More precise quantitative spectral data than can be achieved with manual analysis using an oscilloscope
- Monitoring of laser performance trends such as frequency drift to detect mode hops
- Storage of laser spectral performance data for future analysis and reporting



Characterize laser spectral performance with pinpoint accuracy

FPS-250 NuView software turns a PC into a sophisticated oscilloscope-like device for completely automatic laser spectral analysis. Used with a Fabry-Perot interferometer-based laser spectrum analyzer, FPS-250 software conveniently measures spectral characteristics such as laser linewidth, longitudinal mode structure and frequency stability. The result is a better understanding of laser performance and therefore more meaningful experimental results.



The storage feature is an effective method of measuring the frequency jitter of a laser.

Automatic Spectral Measurements

FPS-250 NuView software takes the signal from a laser spectrum analyzer and converts it for display on a PC. The display looks like an oscilloscope with the added benefit of automatic quantitative measurements of spectral characteristics. The most precise measurements are achieved because the horizontal axis is calibrated by converting ramp voltage to a frequency scale of Hz/volt using the known free spectral range of the Fabry-Perot interferometer. Data can be reported in units of GHz, MHz, cm^{-1} , nm or pm. There is no longer a need to rely on a manual interpretation of rough oscilloscope gradations.

Convenient Operation

Measuring spectral characteristics with FPS-250 NuView software is as simple as placing a cursor on selected peaks and reading the results.

Linewidth (FWHM) is measured by placing a cursor on a chosen peak. The linewidth at other peak heights can also be determined.

Longitudinal mode separation is determined by measuring the frequency difference between cursors placed on different peaks.

Frequency drift is monitored by measuring the change in frequency over time of a chosen peak.

Special Analysis Functions

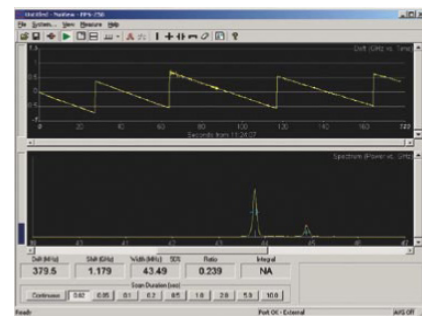
To enable more detailed analysis, data collection by FPS-250 software can be paused at any time to hold the most recently displayed spectrum. The software can also collect data from multiple interferometer scans without refreshing the display to effectively measure the frequency jitter of a laser. What's more, trends in laser spectral performance can be analyzed over time with a real-time plot of drift, longitudinal mode separation or linewidth.

Store Data for Future Analysis

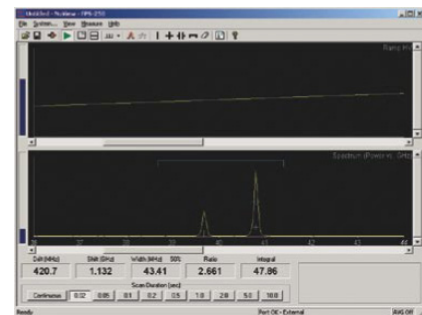
With FPS-250 NuView software, spectral data is available in real-time, or it can be stored for future analysis. An individual spectrum can be selected from memory and displayed, multiple spectra can be displayed as an axonometric plot or data from multiple spectra can be averaged and displayed. In addition, the intensity versus frequency data can be output in a Comma-Separated Value (CSV) format for analysis using other software, such as special graphics programs.

Includes Everything Needed

The FPS-250 NuView system includes software that runs under Microsoft Windows, and all the electronics necessary to interface any EXFO Fabry-Perot interferometer-based laser spectrum analyzer with a PC via USB. Computer requirements (minimum): Windows 2000 or XP, Pentium III processor, 733 MHz, 256 MB RAM, USB 1.1/2.0.



Trend analysis measures changes in laser performance such as the mode hop shown here.



NuView spectrum display shows the spectral characteristics of an HeNe laser.

ORDERING INFORMATION

FPS-250

Model

FPS-250 = Laser Spectral Analysis Software

Example: FPS-250

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