

Photon Control's Optical Spectrometers Deliver for Ultrafast Lasers Outstanding Performance with Full LabVIEW Capability

A leading manufacturer in the ultrafast laser industry uses Photon Control's spectrometers for both their performance capabilities and LabVIEW driven control software. Providing highly accurate bandwidth and center wavelength measurements, the spectrometer's LabVIEW software helps enable easy laser tuning in high performance amplifier systems.

"Photon Control's optical spectrometers incorporate LabVIEW software that integrates easily into other systems. The feature allows our customers to integrate the spectrometer into their system platforms with incredible ease."

Randall Wilcox
Lightspeed Technologies
www.light-speed-tech.com



Problem

Reliable Performance and Easy Integration

- Ultrafast lasers emit pulses very brief in time, on the order of 100 femto-seconds
- Bandwidth and center peak wavelength must be accurately monitored
- Measuring device cannot interfere with laser operation
- Measuring device must be LabVIEW compatible for integration into user program.

Solution

Photon Control Optical Spectrometers Deliver a Solution

- Optical spectrometers accurately measure FWHM bandwidth (~30nm) emitted by lasers
- Pulse duration can be estimated using time-bandwidth constant
- Optical spectrometry does not interfere with laser function
- LabVIEW control software integrates easily into system platform

Results

Outstanding Performance in Laser Amplification

- Highly accurate results for laser parameter calculations
- Excellent performance of laser amplification system
- Fast and easy integration with system existing system software and electronics
- Outstanding overall stability, preventing program crashes caused by software incompatibility or disconnection of USB cable.

To learn how Photon Control's optical spectrometers can solve your measurement problems, please visit www.photon-control.com or email sales@photon-control.com.