ePulse: Laser Measurement News

December 2008

Welcome to **ePulse: Laser Measurement News**, a review of new developments in laser analysis, beam diagnostics, and beam profiling. Each issue contains industry news, product information, and technical tips to help you solve challenging laser measurement and spectral analysis requirements. Please forward to interested colleagues.

Laser Measurement Business

2008 and What to Expect in 2009

In spite of what has happened to the economy during the last month or so, Ophir-Spiricon has seen many accomplishments in 2008. We will end the year with: faster recalibration turn-around, introduction of a wealth of new products, relocation of our engineering department into a new, larger facility, and the launch of our Fast Ship-1 Day program. Find out more in Gary Wagner's article, Laser Business.

Tutorials

Power and Energy Meters: From Sensors to PC

From the time of its invention, more than 30 years ago, the laser power meter was generally comprised of two parts: a measurement head and a display box. It was always considered better to have such an arrangement with a cable connecting the two because of the hazardous nature of the laser beam. Now that the PC is an indispensable lab tool, it is important to be able to integrate measurement instruments with PCs, particularly instruments that can gather large volumes of data. As a result, there is a need for a unified connectivity architecture wherein all measurement heads are compatible with all display boxes and then easily connected to the PC. Find out more in Ilan Haber's article on Power Meters.

Why Do I Need Laser Beam Diagnostics?

Recently, a Nd:YAG laser job shop had trouble with consistency from several of their lasers. Burn patterns revealed uniform, near Gaussian beams. Shop managers and operators were perplexed. But when viewed with a CCD camera and beam analyzer software, they found a beam that was highly distorted and off axis. Find out how the shop and others were able to save money, improve accuracy, and design better lasers in Kevin Kirkham's article on Beam Profiling

FAQs: Power/Energy Meters

What is the difference between P type heads and heads with the standard broadband (BB) coating? Read the FAQ.

Trade Shows

Photonics West & BiOS 2009
See Ophir-Spiricon's newest power meters and beam profiling equipment at Photonics West, including the introduction of the next generation of beam profilers. Booth #834.
January 27-29, 2009
San Jose Convention Center,
San Jose, CA

2008 Laser Measurement Catalog

Download the 2008 Ophir-Spiricon Laser Measurement Catalog today.

Laser Q&A

How do you calculate the power and energy density of a laser beam?
Find out at Laser Q&A.

Fast Ship Program

Ophir-Spiricon's new Fast Ship program provides one-day shipment of the most popular power/energy, beam profiling, and M2 laser measurement equipment.

eProfiles

Dr. Ephraim Greenfield, R&D Manager, Laser Measurement Group, Ophir Optronics
Intensely interested in science from an early age, Ephraim built a six-inch telescope out of parts from Edmund Scientific and a local scrap yard at the age of twelve. After a journey through the worlds of math and physics, he discovered an entrepreneurial spirit that turned a $5000 investment in optical coatings into the optics leader we know today -- Ophir Optronics. Find out more at eProfiles: Ephraim Greenfield.

FAQs: Beam Profiling
Why can't I install the software for my beam profiler from the supplied CD? I get an error message. Read the FAQ

What's New in Laser Measurement

Next Generation Focal Spot Analyzer
Ophir-Spiricon has released the the YAG Focal Spot Analyzer, the next generation of the industry's only real-time system for measuring focus spot characteristics of high power lasers. The Focal Spot Analyzer is a compact, laser beam sampler/attenuator for camera-based laser beam profiling systems. Designed for material processing applications – such as drilling, ablating, and marking – the Focal Spot Analyzer attenuates high power, 1064nm YAG lasers with short, compact path lengths, from 50 to 200mm. Find out more at YAG FSA.

Full Pulsar VI Library Now Available
The new Ophir VIs provide a measurement interface for Ophir's Pulsar PC interface. The library was developed in LabVIEW 7.0. The Pulsar library uses the ActiveX package that is installed as part of the USBI application installation. The LabVIEW library of Pulsar VI's DemoforPulsar.lib and User Manual are available for download today.

On-Site Seminars

Ophir-Spiricon has begun conducting a limited number of on-site beam diagnostic seminars for major laboratory facilities and academic institutions focusing on photonic developments. These educational seminars will include such topics as "Power vs energy: Which do you measure and why," "Focused spot analysis: When it makes sense," and "M2 beam propagation analysis." For more information or to schedule a seminar, contact Kevin Kirkham at Kevin.Kirkham@ophir-spiricon.com or call 435-753-3729.

About Ophir-Spiricon Inc.

Ophir-Spiricon is part of the Ophir Optronics Laser Measurement Group. The Laser Measurement Group provides a complete line of instrumentation including power and energy meters, beam profilers, and spectrum analyzers. Wholly focused on laser measurement, the group's modular, customizable solutions serve manufacturing, medical, military, and research industries throughout the world. Since 1978, an unwavering commitment to forward thinking has kept us "the partner of choice" in optoelectronics.

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