

ePulse: Laser Measurement News July 2010

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.

Tutorials

Beam Profiling: A Primer

A practical guide to camera-based and mechanical scanning-slit beam profiling systems and how to choose the right one for your application. [Read the article.](#)

Applications

Accurately Characterizing High Power Laser Diodes

As high optical power laser diodes evolve, new applications are constantly being evaluated. And so the production and test equipment evolve as well. This paper describes such equipment for one particular laser development company and how it evolved into a product itself along with the use of other high technology support equipment. [Read the article about the challenges of testing laser diodes for real world applications.](#)

Technical Tips

NanoScan Pulse Rate

When measuring pulsed beams with the NanoScan it is important to input the correct pulse rate into the software. Often this is not the value that the laser manufacturer reports or that the user remembers. [Read the tip.](#)

FAQs

Power/Energy Meters

What is "energy threshold" with thermal heads? [Read the FAQ.](#)

The new version of StarLab software available, version 2.01, turns your PC into a laser power/energy multi-channel station. What's so great about it and why should I upgrade? [Read the FAQ.](#)

Beam Profiling

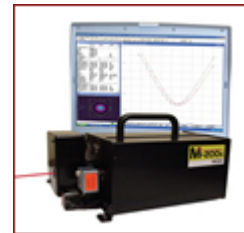
Where is the detector in the NanoScan? [Read the FAQ.](#)

How do I get the ASCII data out of BeamGage? [Read the FAQ.](#)

Video of the Month

M2 Laser Measurement

The quality of a laser beam cannot be determined from a single beam profile measurement. Watch a demo of the Ophir-Spiricon M2-200 beam propagation analyzer as it calculates M2 by focusing the beam with a fixed position lens of known focal length and then measuring the characteristics of the artificially created beam waist and divergence from the near field to the far field. [Watch the video.](#)



Laser Puzzle

[Try your hand at this issue's Laser Puzzle.](#) All entries will receive a 1GB pen drive. The grand prize winner will receive an iPad 16GB WiFi. E-mail answers to sales@ophir-spiricon.com. Need a hint? E-mail kevin.kirkham@ophir-spiricon.com.

Here are the [answers to the last issue's puzzle](#). The winner was **Kevin K. King Ph.D., Boston Scientific.**

Free Laser Measurement Equipment

That's right. If you're an end user of our laser equipment, let's hear about it and how you use it in your application. You can write the whole article or you can collaborate with our talented writers. In exchange, we can negotiate you receiving one our latest innovative

What's New

First Laser-Powered Fuel System for Unmanned Aerial Vehicles

LaserMotive has unveiled its blueprint for creating the first endless power system for unmanned aerial vehicles. Ophir-Spiricon power meters will be used to help the company use laser power beaming – the wireless transfer of energy from one location to another using laser light – to create an unlimited source of power for unmanned aerial vehicles. [Find out more.](#)

Neutral Density Laser Beam Filters for UV Wavelengths

The UV ND Filter system is a family of modular, slide-in neutral density attenuators and a C-mount holder designed to attenuate UV laser beams so they are at the proper intensity for CCD or Pyroelectric cameras. The filters work on lasers in the 190 to 380nm range and cover, for example, Excimer, Helium Cadmium, and Nd:YAG UV harmonic wavelengths. [Find out more.](#)

Sensor Finder Application for Laser Power/Energy Meters

Sensor Finder is an online application that helps users find the best laser power/energy sensor guaranteed to work with their laser. Featured on the Ophir-Spiricon laser measurement web site, it allows users to input laser characteristics and the type of measurement required (power only or energy and power). In return, the program provides a list of Ophir-Spiricon power/energy sensors that are guaranteed to work with their laser under the stated conditions. [Find out more.](#)

Ophir-Spiricon Acquires Photon Inc.

On May 17 of this year, Ophir-Spiricon acquired Photon Inc., a leading manufacturer of laser beam profilers since 1983. Located in San Jose, CA, Photon brings two important technologies to Ophir-Spiricon's array of beam profilers: scanning slit technology, with the [NanoScan](#) family of profilers, and the patented goniometric radiometer [LD 8900](#) family of far-field profilers. Look for more about these instruments and their applications in future issues of ePulse.

Ophir-Spiricon Supports LaserFest

Ophir-Spiricon has joined with the American Physical Society, the Optical Society, and SPIE to celebrate the 50th anniversary of the laser. [Find out about activities and events.](#)



instruments, detectors, or profiling cameras and software to use in your lab. For power/energy meters, e-mail Burt.Mooney@Ophir-Spiricon.com and for beam profilers, e-mail Kevin.Kirkham@Ophir-Spiricon.com. In a few nanoseconds, you'll be telling the laser world about your application using our equipment and a femtosecond or two later you'll be logging your data on our equipment like the Nova II, Vega, Quasar or BeamGage.

2010 Power Meter & Beam Profiling Catalogs

Download the new 2010 Ophir-Spiricon Laser Measurement Catalogs today. Tutorials and products in [Power Meters](#) and [Beam Profiling](#).

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.

Trade Shows

Upcoming shows where you can see Ophir-Spiricon equipment in action. For a complete list of trade shows, [click here.](#)

[SPIE Optics + Photonics](#)

August 3-5, 2010
San Diego Convention Center
San Diego, CA

About Ophir-Spiricon, LLC

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 sensors, 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.

An ISO 9001:2008 Registered
Company.

You are receiving this newsletter because you have previously expressed an interest in Ophir-Spiricon, LLC. To let a colleague know about ePulse: Laser Measurement News, forward this e-mail to them or have them [subscribe](#). If you do not want to receive ePulse: Laser Measurement News, complete our [online unsubscribe request](#).

© 2010, Ophir-Spiricon, LLC
60 West 1000 North, Logan UT 84321
Tel: +1 435-753-3729
www.ophir-spiricon.com