

ePulse: Laser Measurement News July 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.

Tutorials

Beam Width Measurement Accuracy

CCD cameras are commonly used for a variety of imaging applications, as well as in optical instrumentation applications. These cameras have many excellent characteristics for both scene imaging and laser beam analysis. However, CCD cameras have two characteristics that limit their potential performance. Read the details at [Measurement Accuracy](#).

What is M^2 and Why Do I Care?

Most laser engineers and scientists are familiar with beam width, position, divergence angle, Gaussian fit, and such parameters for characterizing a laser beam. M^2 enables a user to quantitatively evaluate the focusability of the laser beam. It is a measure of how close an actual beam is to a perfect Gaussian single mode beam and is very easy to use in predicting the focused spot properties.

[Find out more about \$M^2\$.](#)

Application Note

How many bits is enough? Choosing the correct digitization for a beam profiler depends on the application. Get the details [here](#).

FAQs: Power/Energy Meters

How does a display measure above the maximum frequency at which it can record every pulse? Read the [FAQs](#).

What's New in Laser Measurement

Laser Energy Detector Measures Repetitive Pulses at Industry's Highest Rate – 25 KHz

The **PE9-F Pyroelectric Detector** accurately and repeatedly measures laser pulse energy over an extensive range of conditions. The detector measures repetitive pulses at up to 25,000 pulses per second, the fastest in the industry, when used with the company's **Pulsar-4 Multi-Channel USB Smart Head to PC Interface**. And unlike many detectors on the market, the PE9-F measures each and every pulse, not just a sample. Find out more at [PE9-F](#).

2008 Laser Measurement Catalog

[Download the new 2008 Ophir-Spiricon Laser Measurement Catalog today.](#)

Industry Insight

["Complex, Technical Products in a Commodity World" by Gary Wagner, President, Ophir-Spiricon. Electro Optics, April/May 2008](#)

Laser Q&A

Are pyro heads suitable for power measurement and if so, what is the accuracy?
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 M^2 laser measurement equipment.

eProfiles

Mike Jensen, VP of Operations, Ophir-Spiricon Inc.
Mike Jensen starts each day with a bicycle ride to stimulate the body and mind. A mountain biker for about 10 years, he is currently training for a 206 mile (1 day) bike race. He can't think of a better way to start his day as VP of Operations for Ophir's Laser Measurement Group. Find out more at [eProfiles: Mike Jensen](#).

Conferences & Exhibitions

[ICALEO](#)
October 20-24, 2008
Pechanga Resort
Temecula, CA

New Web Site is Technical Resource for Laser Power/Energy Measurement and Beam Profiling

The new Ophir-Spiricon web site provides quick and easy access to a wide range of technical resources for power/energy measurement, laser beam profiling, and spectrum analysis. Resources include technical white papers, tutorials, frequently asked questions, and application notes. The site also includes a version of the company's catalog of state-of-the-art products for laser measurement applications, including an interactive Head Finder Application. The easy-to-navigate catalog includes detailed specifications and application notes on smart heads and displays; PC interfaces; beam diagnostic software; beam propagation and spectrum analyzers; YAG, CO2, and UV laser profilers; pyroelectric array cameras; and USB, FireWire, and framegrabber-based CCD cameras. Find out more at [Web Site](#).

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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