

Press Release

LaserCam HR™ Laser Beam Profiler Range Expanded with UV & NIR Models



*The Coherent LaserCam HR™ Laser Beam Profiling System with BeamView™ USB Software*

**October 20<sup>th</sup> 2008:** Pro-Lite Technology LLP (Cranfield, England) has expanded its range of Coherent LaserCam HR™ laser beam profilers with high resolution models designed for testing lasers in the ultraviolet and near infrared bands. The LaserCam HR™ UV and LaserCam HR™ InGaAs join the existing LaserCam HR™ model to provide measurements of the shape of pulsed and CW laser beams from 190nm to 1.7µm.

The original LaserCam HR as well as the new LaserCam HR UV are based upon 1.3 million pixel CMOS sensors to provide unrivalled performance and measurement accuracy in the 190-355 and 300-1100nm bands respectively. The LaserCam HR InGaAs (as its name suggests) is based upon an uncooled InGaAs focal plane array detector with 320 x 256 pixels for profiling of IR laser beams in the 900-1700nm wavelength range.

All models in the LaserCam HR family combine the speed and ease of use of a USB 2.0 computer interface with the power and ease of use of Coherent's BeamView Analyzer PC beam diagnostic software. A single interface cable that carries both signal and power on the same wire makes camera placement a snap. USB 2.0 connectivity assures compatibility with virtually all new computers, including laptops.

As a laser beam propagates, changes in the laser cavity, as well as changes in the beam divergence and its interaction with optical elements, cause the width and spatial intensity of the beam to change. Spatial intensity distribution is a fundamental parameter for indicating how a laser beam will behave in any application. Each LaserCam HR profiler can precisely measure the intensity distribution and beam size of almost any laser beam.

LaserCam HR profilers ship with Coherent's BeamView™ USB software which provides real-time cross-sectional as well as 2D and 3D profiles that facilitates laser system tuning and optimisation. The beam parameters reported include beam position (centroid and peak location), beam size and shape (diameter and ellipticity), far-field data (divergence, pointing and bore-sighting), mode structure (uniformity and fit to Gaussian) as well as the beam power and power density (or energy and energy density for pulsed lasers). Statistical parameters reported include the mean, maximum, minimum and standard deviation for the beam parameters and beam wander. The software accommodates data-

logging, supports pass/fail type reporting and can output an alarm for beam parameters that are out of range

The latest update to BeamView USB software (version 4.3.1) includes a flat top beam analysis tool that reports the beam uniformity, plateau uniformity, flatness factor, edge sharpness, effective irradiation area and effective average power density. BeamView also now ships with an extensive library of LabVIEW Virtual Instruments (VI) which allow direct control of virtually all BeamView functions using National Instruments' LabVIEW software, versions 7.1 through 8.2. BeamView USB can now be automated to run remotely through a LabVIEW development environment by selecting any of the VI libraries.

Web link: [http://www.pro-lite.co.uk/File/laser\\_beamprofilers.php](http://www.pro-lite.co.uk/File/laser_beamprofilers.php)

**About Pro-Lite:** Pro-Lite is a specialist distributor providing value-added service to the laser and optical radiation measurement communities in the UK and Ireland. Pro-Lite supplies lasers, laser safety eyewear, laser power and energy meters, precision opto-mechanics, as well as a complete spectrum of equipment for measuring optical radiation and the optical properties of materials.

#### **FOR FURTHER INFORMATION:**

Robert Yeo, Pro-Lite Technology LLP, Cranfield Innovation Centre, University Way, Cranfield, MK43 0BT, United Kingdom

Tel: +44 (0) 1234 436110 Fax: +44 (0) 1234 436111 [info@pro-lite.co.uk](mailto:info@pro-lite.co.uk) [www.pro-lite.co.uk](http://www.pro-lite.co.uk)