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New product announcement **Freiburg, July 4, 2012**

New outstanding laser designed for image processing

Z-LASER, a leading manufacturer of lasers and laser systems, announces its new compact laser; the **ZQ1**. Demand from the product came from our worldwide customer base who was asking us to develop a new generation of high quality laser head. New benchmarks were made with the **ZQ1** in several key areas; excellent beam quality (M^2 <1.2), line performance (homogeneity ±15%), outstanding boresight accuracy (3mrad) and high IP protection class (IP69 housing on request).

A special 1W/808nm single-mode laser diode exclusive to ***Z-LASER*** provides ultrafine projections whilst simultaneously producing extremely high power (>300W/mm², focus at 300mm). Even with image processing applications with high ambient light influence the highest measurement resolutions are possible (for example, 170 microns FWHM in laser line width from a 1300 mm working distance). This leads to new levels of accuracy in measurements in applications such as inspection of glowing steel, road surfaces, rails and overhead wires which are all enhanced by strong high-contrast images.

Intelligent monitoring capabilities and a built-in thermoelectric cooling allow for very high stability in terms of power (≤3%), wavelength and lifetime. The laser model **Z1000Q1-808** is equipped with various line and spot optics as well as a selection of diffractive optics. The laser is controlled via an RS-232 interface and provides a TTL modulation up to 10kHz.

ZQ1 – main features:

- Compact all-in-one housing with integrated optics, electronics and active temperature control
- IR up to 1W output
- Different projections available (line and point diffractive optics, and optics)
- Boresight accuracy 3mrad
- Protection class IP69 on request
- Modulation up to 10 kHz
- RS-232
- 5-24VDC supply voltage

About *Z-LASER*

Since inception in 1985, ***Z-LASER*** is known as a manufacturer of industrial laser systems for manufacturing, medical and scientific applications. The team has its own large development department that utilizes our expertise in optoelectronics and laser technology to come up with innovative solutions. For more company details see www.z-laser.com.