
New product announcement

4th April 2014

Newly developed blue laser for image processing

Freiburg, Germany. **Z-LASER**, a leading manufacturer of lasers and laser systems, announces its new compact and powerful blue laser; the **ZQ-blue**. The product development of **ZQ-blue** combines good line performance (homogeneity $\pm 15\%$) and solid IP50 protection class (higher IP rated housing is available upon request).

A special 1W/450nm laser diode provides ultrafine projections while simultaneously producing extremely high power density. Even for image processing applications with high ambient light interference, the highest measurement resolutions are possible with the **ZQ-blue**. For example at a working distance of 500mm, 73 microns FWHM can be achieved. This performance leads to new levels of accuracy in measurements for inspection applications such glowing steel, road surfaces, rails and overhead wires which are all enhanced by strong high-contrast images.

Intelligent monitoring capabilities and built-in thermoelectric cooling allow for very high stability in terms of power ($\leq 3\%$), wavelength and lifetime. The **ZQ-blue** laser can be equipped with various line and spot optics as well as a selection of diffractive optics. The **ZQ-blue** laser is controlled via RS-232 or RS-485 and provides a TTL modulation up to 10kHz or up to 1kHz via PLC.

ZQ-blue – main features:

- 450nm up to 1W output
- Different projections available (line and point optics, diffractive optics)
- TTL modulation up to 10 kHz / PLC up to 1kHz
- RS-232 & RS-485
- 24VDC supply voltage



About **Z-LASER**

Founded in 1985, **Z-LASER** is well-known as a manufacturer of industrial laser systems for manufacturing, machine vision, measurement and medical applications as well as applications in analysis and science. 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.