

## Press Release

### Single Photon Counter from LASER COMPONENTS

#### The COUNT<sup>®</sup> NIR Counts Single Photons from 400 - 1000 nm

If conventional detectors are unable to distinguish between signal and noise, then single-photon detectors are used. These detectors have a high detection efficiency at a low dark count rate like LASER COMPONENTS' silicon-based single photon avalanche diodes (SPADs). When equipped with electronics, they turn to easy-to-handle photon counting modules.

Especially made for wavelengths in the near infrared LASER COMPONENTS introduces the single photon counting module COUNT<sup>®</sup> NIR. It has a notable detection efficiency of 60% at 810 nm and achieves further more a maximum detection efficiency of almost 80% at 700 nm. Dark count rates of less than 50 photons per second are common. To operate this module, TTL pulses can be used: for this purpose, the COUNT<sup>®</sup>s are equipped with a gating input. The power is connected using a 12 V power supply.

The COUNT<sup>®</sup> NIR development has been pushed because of experiments in fundamental research where light quanta play a crucial role. Many experiments are conducted in the wavelength range around 810 nm, such as, for example, in quantum optics and quantum information.

#### More Information

<http://www.lasercomponents.com/de-en/product/count-nir/>

#### Trade Shows

**BiOS 2014**, Feb., 01. - 02., 2014, The Moscone Center, San Francisco, USA, **Booth 8517**  
**Photonics West 2014**, Feb., 04. - 06., 2014, The Moscone Center, San Francisco, USA, **Booth 517**  
**analytica 2014**, Apr., 01. - 04., 2014, Neue Messe München, **Booth A2.400A**  
**Optatec 2014**, May, 20. - 22., 2014, Messe Frankfurt  
**Defense, Security & Sensing 2014**, Apr., 30. - May, 02., 2014, Baltimore, USA, **Booth 1030**  
**Sensor + Test 2014**, Jun., 03. - 05.2014, Messe Nürnberg, **Booth 12.117**

#### The Company

LASER COMPONENTS is specialized in the development, manufacture, and sale of components and services for the laser and opto-electronics industries. With sales offices in four different countries, the company has served its customers since 1982. In-house production at six locations in Germany, Canada, and the USA began in 1986 and is meanwhile responsible for about half of its turnover. Currently, the family-run business employs more than 150 people worldwide.