

## Press Release

### On the Path to Industry 4.0

### Building Blocks of an Intelligent Network with Photodiode Sensors

LASER COMPONENTS revamped InGaAs and extended InGaAs photodiode technology, which has led to the development of not only the components themselves but to groundbreaking industrial „Plug&Play“ sensors as well – the MAJOR series.

The photodiode sensors have a panchromatic detector with a sensitivity range of 450 nm to 2000 nm and a reduced temperature dependence.

They work reliably in (core) systems and are able to read out evidential data – e.g. data can be tagged with a time stamp. Furthermore they have a calibration option, a digital and analog output, an internal storage capacity, and are integrated in a housing with an external M12 thread. Powerful electronics have been embedded into the MAJOR-A. It offers an arithmetical averaging between measurement values, an offset correction, and the option “measure on demand”. Additional features are the automatic amplification adjustment and the programmable amplification.

The built-in photodiode is also made by LASER COMPONENTS. At wavelengths below 2100 nm, the temperature coefficient of the IG22X1000S4i is less than 0.01%/K (see figure). Thus, a temperature change of 50 K results in a deviation of only 0.5%. Inside the MAJOR it is possible to improve this value again via software.

### More Information

<http://www.lasercomponents.com/de-en/product/major-a/>

### 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 specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in four different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the USA. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 160 employees worldwide.