

Press release  
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## Series 9.5 APDs with enhanced NIR sensitivity up to 950 nm

The new Series 9.5 avalanche photodiodes from First Sensor feature an increased sensitivity in the near infrared (NIR) wavelength range up to 950 nm. Due to its fast rise time and very low dark current the photodiodes are ideal for applications with low light intensities and high modulation frequencies such as laser rangefinding and laser scanning. The slow increase of the amplification with the applied reverse bias voltage of the Series 9.5 allows for easy and precise adjustments of high gain factors.

The Series 9.5 APDs from First Sensor provide an excellent quantum efficiency of > 80 % in the 730 ... 930 nm range and have the option of equipping different band-pass filters. The very flat leadless ceramic-carrier SMD package is suitable for reflow soldering in industrial PCB assembly. Other housing options and designs are available upon request. Thanks to its own semiconductor manufacturing facility and extensive development capabilities First Sensor can adapt all optical sensors to customer specific requirements with respect to sensitivity, gain, speed or capacitance.

Important features of the Series 9.5 avalanche photodiodes:

- Enhanced NIR sensitivity up to 950 nm
- Fast rise time and very low dark current
- Flat gain curve
- Leadless ceramic-carrier SMD package

Typical applications of the new Series 9.5 avalanche photodiodes with enhanced NIR sensitivity include safety scanners, 3D-mapping, environmental monitoring, high resolution LIDAR systems for autonomous driving as well as high speed photometry and fiber optical communication.

Further product information: <http://www.first-sensor.com/en/products/optical-sensors/detectors/avalanche-photodiodes-apd/series-9.5-with-enhanced-nir-sensitivity-950-nm/>

## **About First Sensor AG**

First Sensor AG is one of the world's leading suppliers in the field of sensor systems. Our company develops and manufactures both standardized and tailor-made sensor solutions for the detection of light, radiation, pressure, flow, level and acceleration for applications in the Industrial, Medical and Mobility growth markets. The company produces in-house and along the value-added chain from component to system level.

With over 800 employees, we are represented at six German locations and also have development, production and sales sites in the USA, Canada, China, the Netherlands, UK, France, Sweden and Denmark along with a worldwide partner network. We guarantee our compliance through regular successful certifications of the sites according to ISO/TS 16949, ISO 14001, EN ISO 13485, EN 9100 and ISO 9001 - matching the respective business field.

First Sensor AG is listed in the Prime Standard of the German stock exchange in Frankfurt.

For more details on First Sensor, please visit: [www.first-sensor.com](http://www.first-sensor.com)

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