

## **SUPERSCAN IV-15 WAFER – RAYLASE presents new 2-axis deflection unit with very high deflection speed for innovative wafer solutions.**

Wessling, Germany, Monday, 20. August 2018

**With its new SUPERSCAN IV-15 WAFER 2-axis deflection unit, RAYLASE GmbH offers a sophisticated solution for challenging industrial applications. Predestinated applications include, in particular, the structuring of wafers in the solar industry.**

This special version of the SUPERSCAN-IV-15, with its ultra-high speed, is designed to meet the high-performance requirements that apply to the manufacturing of wafers, where the highest possible angular velocity is essential.

One trend-setting application for the SUPERSCAN-IV WAFER is the production of photovoltaic wafers using the innovative PERC technique. The International Technology Roadmap for Photovoltaics (ITRPV) predicts that this technology will have a global market share of over 45% by 2025. PERC wafers consist of solar cells with a passivated emitter and passivated rear side. They are capable of reflecting light at wavelengths above 1,180 nm, resulting in less heat development in the cell and a significantly higher efficiency of conversion into usable energy.

RAYLASE has optimized the SUPERSCAN IV-15 specifically for these applications to enable the high-quality yet time- and cost-efficient production of these powerful PERC photovoltaic wafers. The SUPERSCAN IV-15's model-based, digital control offers extremely high speeds of up to 200 rad/s.

Speed and dynamic responses are guaranteed, thanks to digital control and powerful PWM output stages. When combined with the RAYLASE camera adapter and MVC components, the SUPERSCAN IV-15 is the perfect precision tool with process monitoring.

The robust, water-cooled master block design enables applications at up to 2 kW laser power when quartz mirrors are used. The deflection unit can be controlled digitally both via the XY2-100 enhanced protocol and via the SL2-100 protocol. The input aperture is 15 mm. Lenses with optimized holders and scan mirrors are available for all standard laser types, wavelengths, power densities, focal lengths and processing areas. Custom solutions can also be provided.

---

### **About RAYLASE**

RAYLASE GmbH, founded in 1999 and ISO-certified since 2006, offers high-precision components, control cards and software for the fast deflection and modulation of laser beams. With over 100 employees worldwide, RAYLASE stands for innovative technology, the highest quality standards and customer proximity as a value we put into practice every day.

Our components comprise top-quality optical elements, galvanometer scanners and control electronics with an intuitive software interface. They form the cornerstone of industrial laser systems for scanning printed codes, marking textiles and surfaces, welding metal plates and plastics, and cutting and drilling semiconductor wafers and materials such as metal, plastic or glass. Our current focus markets are additive manufacturing, e.g. in 3D printers, welding in different industries and various applications such as marking, cutting and perforating, for example, in the packaging industry.

Our customers are companies from a wide range of fields. The electronics, automotive, photovoltaic, textile and packaging industries are using lasers to replace traditional production processes or to implement entirely new ones. In addition, increasing numbers of new industries are discovering the innovative potential of this technology every day. That makes RAYLASE a player in an important global growth market.

[www.raylase.de](http://www.raylase.de)

# Press Release



**Contact:**

Marketing: Mandy Böhme, [m.boehme@raylase.de](mailto:m.boehme@raylase.de), +49 8153 8898-12

Press: Elke Peter, [info@elke-peter-werbung.de](mailto:info@elke-peter-werbung.de), +49 8142 48 86 61