Your Partner for Leading-Edge Scan Solutions





SCANLAB GmbH is the leading OEM manufacturer of scan solutions for deflecting and positioning laser beams

- More than 40,000 scan systems shipped worldwide annually
- Developed and manufactured in Germany
- Highest quality standards
- Application-specific custom solutions
- Proactive creation of new laser applications through collaborative research





R&D Expertise for Your Laser Application

SCANLAB GmbH has been developing and manufacturing galvanometer scanners and scan solutions since its 1990 founding. Our highly qualified and motivated team of about 500 employees possesses extensive market and application experience. SCANLAB's headquarters in Germany currently manufactures and globally sells more than 40,000 scan solutions annually. As market leader, we have the largest installed base in the world.

Due to the positive business development, the company's own building is currently being expanded in a fourth construction phase, which will be completed in 2024. The focus is on plenty of daylight, a communication-friendly layout and ergonomic workstation equipment.

SCANLAB places great importance on expertise and diversity. Our staff hails from 36 countries and the proportion of women is approx. 39%.



International Locations and Partnerships

SCANLAB employs industry and application experts worldwide, to ensure that the most comprehensive and local support is possible. In the US, SCANLAB is represented by SCANLAB America, Inc. in Saint Charles (near Chicago), Illinois. In the Asian markets local distributors support the international sales team.

The sister company Blackbird Robotersysteme GmbH, a system solution specialist for innovative robot-assisted laser welding, is headquartered in Garching near Munich. Sales and customer support for Asia is handled by the subsidiary Blackbird Robotics (Shanghai) Co. Ltd. in Shanghai, China.

The sister company HOLO/OR, expert for diffractive optical elements (DOE) for industrial laser applications, is located in Ness Ziona, Israel.



	Welding	Cutting	Perforating	Engraving	Additive Manufactur	Marking	On-The-Fly Applicatio	Scribing	Drilling	Precession Drilling	Micro Material Proce Structuring	Soldering	Heat Treatment	Medical Treatments	Eye Surgery	Biomedical Imaging
Power			•	•	•	•	•	•	•	•	•	•		•		
Speed	•	•		•	•			•		•	•	•	•	•	•	
Precision	•	•	•		•	•	•	•	•					•		•





Technology Accross All Industries

Scan systems are used for laser processing in numerous industries:

- Automotive
- Electronics & communications
- Packaging & food sector
- Lightweight construction
- Electromobility (E-Mobility)
- Machine tool and metalworking industry
- Medical technology
- Photovoltaics
- Textiles
- Time pieces, jewelry & lifestyle

The high-performance components meet diverse speed, precision and laser-power requirements for optimal flexibility in laser processing, treatment and imaging.





Deflecting the Laser

As a technology leader in the development and manufacturing of galvanometer-based scanning systems, we have been experts in the deflection of laser beams for more than 30 years.

Determining the Optimum Scanning System

The SCANcalc app is available for various calculations. The app enables users to select the right scan head for their individual requirements at the touch of a button.











Operating Principle of a Scan System

Laser beam deflection is performed via scan mirrors, which are quickly and precisely positioned by galvanometer motors. The scan head integrates all components, including electronics, in a compact, sealed housing.

The laser beam is focused by an objective at the scan system's beam exit or by a focusing system at the beam entrance. A camera adapter can be installed to monitor processing.

SCANLAB Range of Services





Our Product Range

SCANLAB products range from galvanometer scanners to 2D and 3D scan heads, supplementary z-axes and complex scan solutions for ultrashort pulse and high-power lasers. The various scan systems differ in terms of dynamics, laser power and precision and can be further adapted for customer-specific applications.

In addition, software solutions for laser material processing and scan control as well as a wide selection of control electronics, calibration solutions and optical accessories complete the product range.



Quality Made in Germany

The name SCANLAB stands for product-quality excellence, comprehensive expert advice and dependable deliveries. Its highly stable production processes are characterized by precisely defined workflows and are certified in accordance with DIN EN ISO 9001.

We design our own test procedures to ensure exceptionally high quality standards and reliable products. Each scan system is subject to numerous tests both during and after manufacturing, including optical verification of the beam position. Our products only receive the *SCAN*check quality seal after passing the final test.



SCANLAB GmbH · Siemensstr. 2a · 82178 Puchheim · Germany Tel. +49 (0)89 800 746-0 info@scanlab.de · www.scanlab.de

SCANLAB America, Inc. · 100 Illinois Street · Suite 200 · St. Charles, IL 60174 · USA Tel. +1 (0)630 797-2044 info@scanlab-america.com · www.scanlab-america.com

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