THE POWER OF WE.

PRE-FOCUSING-UNIT
For industrial E-Mobility and additive manufacturing

The AXIALSCAN FIBER-30 is the result of our continuous and heavily market-oriented enhancement of the AXIALSCAN model range for fiber-coupled laser applications. New industrial markets require new processes. These include “High Power” welding in the e-mobility market and “High Dynamic” versions for the powder-bed process (SLM) in additive manufacturing. The pre-focusing units are easily integrated and offer various mechanical interfaces below, to the side (robot flange is possible) and from above for ideal integration and configurability. Suitable mirrors are available both for high-performance welding applications with laser power in the multi-kilowatt range and for highly dynamic applications. Optical configurations are available for all standard beam parameters of lasers and their fibres. Large, pre-adjustable processing field sizes from 250 x 250 mm² to 850 x 850 mm² give you a large degree of flexibility with which to perfect your applications. RAYLASE also offers type-specific tuning specifications for the AXIALSCAN FIBER-30 series. As well as having an integrated fibre collimator and process light output, an additional protective window ensures complete protection against dust.

2-AXIS DEFLECTION UNITS
For high dynamics and speeds at maximum productivity

The model-based, digital control of the SUPERSCAN IV-10 offers the highest dynamics and final speed, which is particularly useful for marking and extremely fast but still precise structuring, cutting and drilling applications. The robust, water-cooled master block design guarantees stable, low-drift operation even with very frequent beam direction reversals and high jump frequencies.

- Control via SL2-100 protocol 20 bit or XY2-100 protocol 16 bit
- Digital driver board (PWM) with significantly reduced power loss and minimal heat development
- Dynamic responses and high speeds for maximum productivity
- Wide range of tunings, mirror substrates and coatings for diverse applications
- Input aperture: 10 mm

SUPERSCAN-IV-10
The new MINISCAN III offers very stable digital control, which further improves noise and drift values, thereby making the system even more reliable and robust. Both the XYZ-100 16 bit and the SL2-100 20 bit protocols can be used with the digital interface. A corresponding cable defines the use of the protocol.

- Control via SL2-100 protocol 20 bit or XYZ-100 protocol 16 bit
- Digitally controlled, low noise and drift
- Robust and dust-proof for industrial applications
- Various mirror substrates and coatings for marking and cleaning
- Input aperture: 10 mm, 14 mm or 20 mm

DIGITALLY CONTROLLED FOR HIGHEST MARKING SPEEDS

MINISCAN III-10, 14, 20

About RAYLASE

RAYLASE GmbH, from Wessling near Munich, offers high-precision products for fast deflection and modulation of laser beams. These comprise top-quality optical elements, high-precision deflection units and control electronics with intuitive software.

Our products form the cornerstone of versatile industrial laser systems for established and high-end laser techniques for laser processing. From the laser marking of organically farmed oysters, to the manufacture of e-mobility battery cells, to the production of 3D workpieces from metal powder in additive manufacturing. Laser material processing with RAYLASE solutions is flexible, innovative and cost-effective.

Since 1999, we’ve been enabling manufacturers, integrators, plant manufactu-

ers and researchers to harness the possibilities of laser technology with our unique performance and reliability.

With our innovative solutions, we at RAYLASE are helping create a sustainable future. And, because the development and implementation of solutions like these represent a challenge, we continuously strive for excellence; act responsibly, fairly and cooperatively; and always go the extra mile in providing our customers with the right solutions.