

excelliSCAN 30 ARRAY

New!

More Productivity for Additive Manufacturing



Advantages.

The excelliSCAN system especially for additive manufacturing

The excelliSCAN 30 ARRAY is specially adapted for additive manufacturing and impresses above all with its compact design. It also includes other features that turn it into the ideal tool for demanding AM applications:

- High image field overlap in multi-head systems
- SCANahead control technology
- Temperature sensors for system monitoring
- Outstanding dynamic performance

Ready for SCANmotionControl

- Shortest process times thanks to optimum use of scanner dynamics and laser power
- Maximum accuracy and precise laser control
- Simple trajectory planning and simulation: "What you see is what you get"



More information about SCANmotionControl in the video:









Highlights & Specifications

Laser

Laser off time **SCAN**ahead

Laser off time conventional

High image field overlap

The slim design and a optimized galvo-position allow the systems to be installed close together in a multihead system.

Your advantages: high productivity, simple integration, more freedom in process design

SCANahead control technology

The maximum acceleration and deceleration significantly reduces reversing distances.

Your advantages: shorter process times



Precision & Stability

Image fields

Repeatability (RMS) [µrad]	< 0.4
Dither (RMS) [µrad]	< 1.6
Nonlinearity [mrad] (1)	< 0.5
Temperature drift	
Offset [µrad/K]	< 10
Gain [ppm/K]	< 5
Long-term drift	
Over 24 hours (after 3 h warm-up) (2)	
Offset [µrad]	< 20
Gain [ppm]	< 25

Dynamics

Tracking error [ms]	0
Acceleration [rad/s ²]	130,000
Maximum speed [rad/s]	70

Common Specifications

Optical performance	
Typical scan angle [rad]	±0.37
Gain error [mrad]	< 5
Zero offset [mrad]	< 5
Wave length [nm]	1060 – 1085
Max. laser power [kW]	2
Power supply (RMS)	48 V, 5 A
Digital interface	SL2-100
Weight [kg]	approx. 9

 $^{(1)}$ related to 0.77 rad $\,^{(2)}$ at constant ambient temperature and load (all angles are in optical degrees, all specifications are preliminary)

Technical Drawings







all dimensions in mm

102024 Information is subject to change without notice. Product photos are non-binding and may show customized features. Photos manufacturing process and cooper component: EOS GmbH

SCANLAB GmbH · Siemensstr. 2a · 82178 Puchheim · Germany Tel. +49 89 800 746-0 · info@scanlab.de · www.scanlab.de SCANLAB America, Inc. · 100 Illinois St · St. Charles, IL 60174 · USA Tel. +1630797-2044 · info@scanlab-america.com · www.scanlab-america.com

