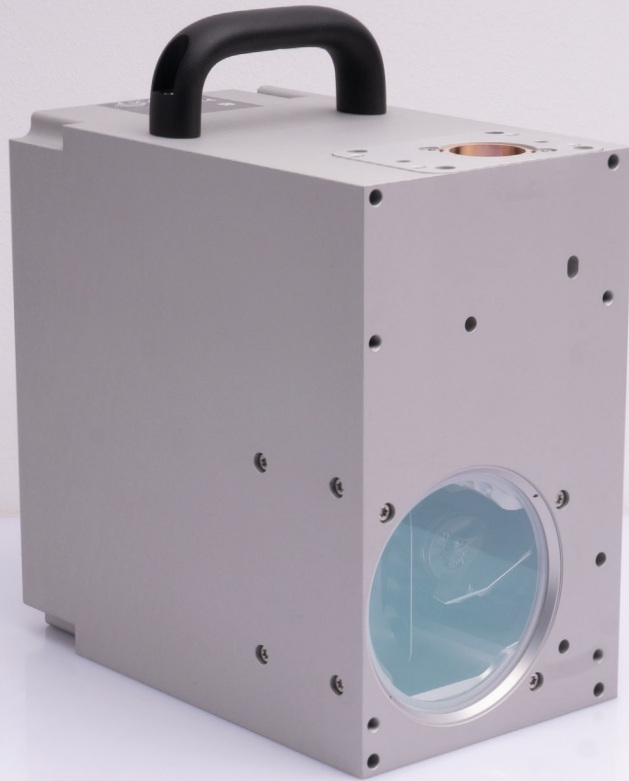


**New!**



**excelliSCAN 30 ARRAY**

**More Productivity for Additive Manufacturing**

# Advantages

## The excelliSCAN system especially for additive manufacturing

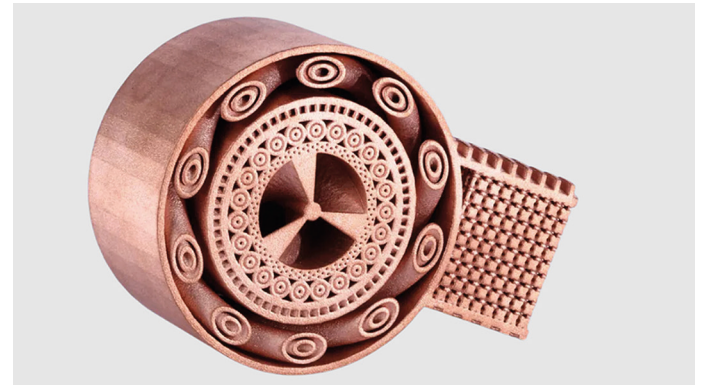
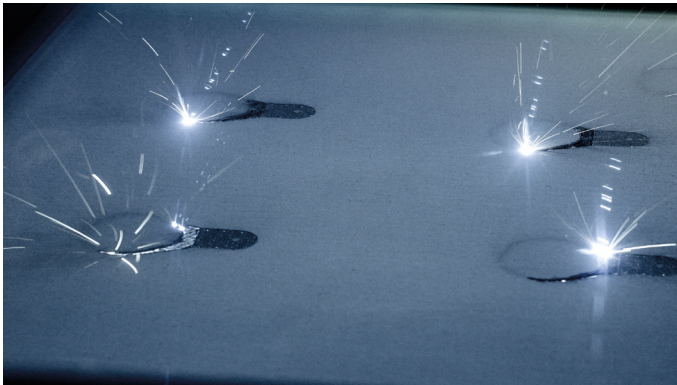
The excelliSCAN 30 ARRAY is specially adapted for additive manufacturing and impresses above all with its compact design. It also includes other features that turn it into the ideal tool for demanding AM applications:

- 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:

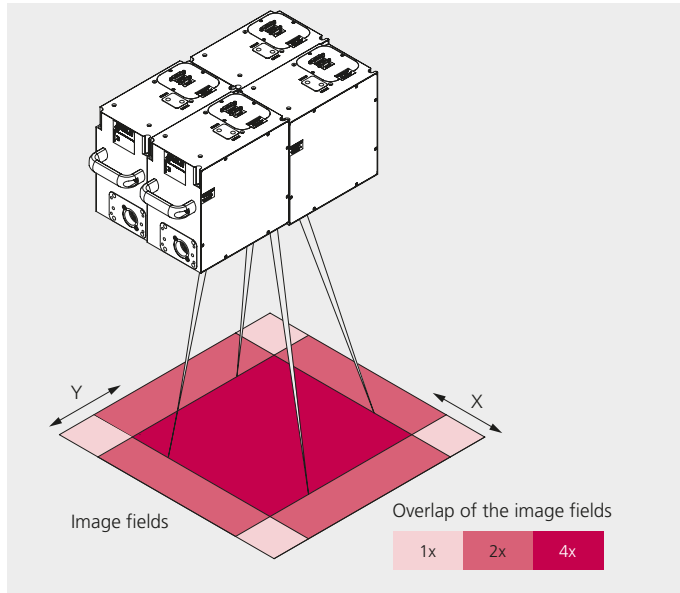


# Highlights & Specifications

## High image field overlap

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

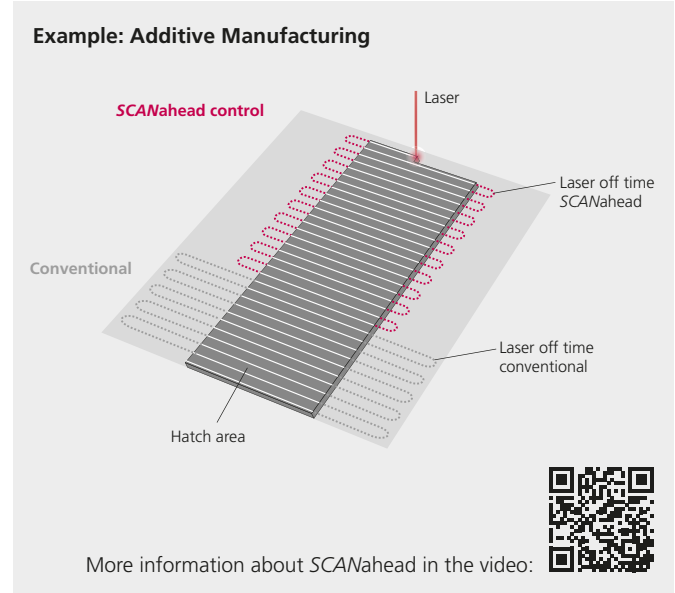
**Your advantages:** high productivity, simple integration, more freedom in process design



## SCANahead control technology

The maximum acceleration and deceleration significantly reduces reversing distances.

**Your advantages:** shorter process times



## Precision & Stability

<b>Repeatability</b> (RMS) [ $\mu\text{rad}$ ]	< 0.4
<b>Dither</b> (RMS) [ $\mu\text{rad}$ ]	< 1.6
<b>Nonlinearity</b> [mrad] <sup>(1)</sup>	< 0.5
<b>Temperature drift</b>	
Offset [ $\mu\text{rad}/\text{K}$ ]	< 10
Gain [ppm/K]	< 5
<b>Long-term drift</b>	
Over 24 hours (after 3 h warm-up) <sup>(2)</sup>	
Offset [ $\mu\text{rad}$ ]	< 20
Gain [ppm]	< 25

## Dynamics

<b>Tracking error</b> [ms]	0
<b>Acceleration</b> [ $\text{rad}/\text{s}^2$ ]	130,000
<b>Maximum speed</b> [ $\text{rad}/\text{s}$ ]	70

## Common Specifications

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

<sup>(1)</sup> related to 0.77 rad <sup>(2)</sup> at constant ambient temperature and load  
(all angles are in optical degrees, all specifications are preliminary)

