z-shifting that breaks the speed limit

SCANLAB's new excelli*SHIFT* extends a 2D scan head into a **highly dynamic 3D system**. Based on tried-and-proven galvanometer technology, its completely new design drastically improves dynamic performance compared to conventional z-axes.

The Z-scanner is no longer a limiting factor, so that identical acceleration can be achieved in all in all three spatial directions.This opens up entirely new possibilities for laser processing of 3-dimensional, complexly-shaped surfaces. Moreover, the new technology uses no transmissive optical components. That means dispersion effects are avoided when working with different wavelengths, and thermal-lens effects are minimized, too.

The excelli*SHIFT* is ideal in combination with excelli*SCAN* and intelli*SCAN* scan heads and is now also available with *SCAN*ahead technology.

Typical applications:

- Micromachining
- Marking of curved surfaces
- Deep engraving
- Ultra-fast 3D processing

Key advantages:

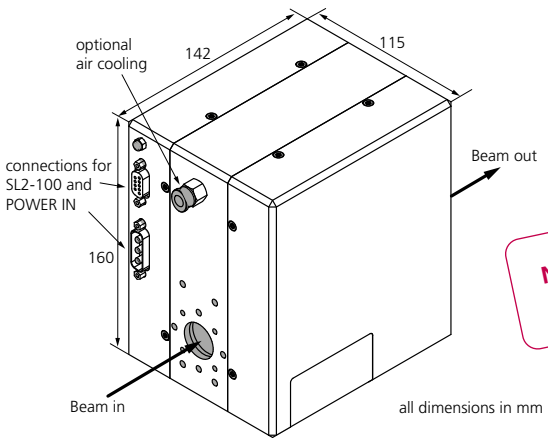
- Highest reliability due to field-proven galvanometer technology
- High-dynamic processing of complex 3D-surfaces
- Designed without transmissive optical components
- Flat field correction of pre-focused systems without dynamic limitations
- Position-independent mounting

Specifications

Aperture	14 mm
Wavelength	515 nm - 532 nm, 1030 nm - 1070 nm [1]
Beam expansion	1-fold
Tracking error	0.1 ms
Beam guidance	reflective
Dimensions W x H x D	(115 x 160 x 142) mm^3
Weight	3.7 kg
Laser power (with cooling)	120 W (green) 200 W (IR)
Focus range [2]	±14 mm
Focus speed in image field [2]	up to 30 m/s

[1] other wavelengths available on request

[2] with f-theta lens, f = 160 mm; at larger focal lengths corresponding higher values are achieved



Now available with SCANahead technology!

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. +1 (630) 797-2044 · info@scanlab-america.com · www.scanlab-america.com

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