



## z-shifting that breaks the speed limit

SCANLAB's new excelliSHIFT extends your 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 excelliSHIFT is ideal in combination with excelliSCAN, intelliSCAN and SCANcube scan heads.

### Typical applications:

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

### Key advantages:

- Extends 2D scan heads into highly dynamic 3D scan systems
- 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

### Preliminary specifications

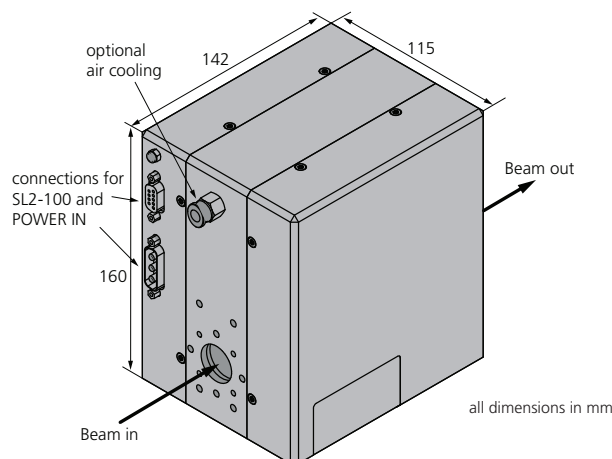
Aperture	14 mm
Wavelength	515 nm - 532 nm, 1030 nm - 1070 nm <sup>(1)</sup>
Beam expansion	1-fold
Tracking error	0.1 ms
Beam guidance	reflective
Dimensions W x H x D	(115 x 160 x 142) mm <sup>3</sup>
Weight	3.7 kg

### Focal-length-dependent specifications

Focus range <sup>(2)</sup>	±15 mm
Focus speed in image field <sup>(2)</sup>	up to 30 m/s

<sup>(1)</sup> other wavelengths available on request

<sup>(2)</sup> with f-theta lens, f = 163 mm; at larger focal lengths corresponding higher values are achieved



06/2017 information is subject to change without notice. Product photos are non-binding and may show customized features.