Mini Light Sheet Optics (miniLSO)



PIV and PLIF measurements require a light sheet with well defined geometrical characteristics and intensity distribution. ILA_5150 offers a range of integrated light sheet optics that are compact, modular and simple to adjust. In a single unit, the standard models include a focal distance adjustment ring to set the light sheet thickness of the illumination plane. A set of cylindrical lenses generates light sheets with opening angles of 16, 30 and 50 degrees. The light sheet optic MiniLSO is compatible with the beam diameter

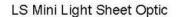
Features:

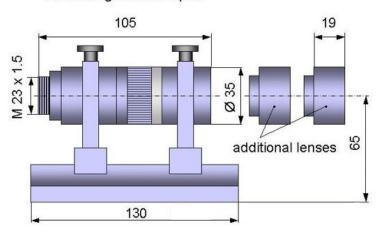
- Single, compact unit
- Simple adjustment of both light sheet thickness and light sheet divergence angle
- 360 degree adjustable light sheet orientation
- Multiple light sheet thickness and angles ranges
- Mounts on articulated mirror arm or directly on Mini Nd:YAG Laser heads

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Specifications

Dimensions: 105 mm x Ø35 mm

Weight: Ø12 mm (standard design)

Lenses: 3 or 4 lenses, anti-reflection coating, energy

threshold: 4,5 J/cm2

Light sheet divergence angle: 3 lenses: 16°, 30° and 50°

Adjustable focal distance range: 100...3000 mm

Min. Light Sheet Thickness(*): 0.5 mm

1 kg

Aperture:

Accessories

- Direct Laser adapter mount for Nd:YAG Laser (for several models available)
- General-purpose rail-mounted clamp to fix light sheet optics position
- Adapter piece for mirror arm (M23x1.5)
- (*) Achievable minimum light sheet thickness is a function of the beam diameter, and therefore of the laser model coupled to the light sheet optic.

Options

- Customized versions available on demand:
 - Collimating lens unit to generate parallel light sheets
 - Special geometries
 - Special adapters
 - Special light sheet divergence angles possible

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