

## Parallel Light Sheet Optics



PIV and PLIF measurements require a light sheet with well defined geometrical characteristics and intensity distribution. ILA offers a range of integrated light sheet optics that are compact, modular and simple to adjust. The parallel LS optic generates a 50mm high light sheet over a long distance which can be focussed down to ~1mm depending from the laser beam characteristics. By removing the first cylindrical lens, a divergent light sheet is generated. A set of cylindrical lenses to generate light sheet angles of 16, 30 and 50 degrees is included. The light sheet optic is compatible with the beam diameter of all commercial Nd:YAG lasers up to 600 mJ and especially recommended for lasers with high divergent beams due to the special collimator design.

### Features:

- Single, 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
- High energy level in the light parallel light sheet over long distance

## Specifications

Dimensions:	<u>405 mm x Ø60 mm</u>
Weight	<u>1918 g</u>
Aperture	<u>Ø50 mm</u> (standard design)
Lenses	4 lenses, anti-reflexion coated, energy threshold 4,5 J/cm <sup>2</sup>
<u>Light sheet divergence angle</u>	Adjustable in steps 16°, 30° and 50°
Focussing Distance	Adjustable <u>100...3000 mm</u>
Min. Light Sheet Thickness(*)	0.5 mm

### Accessories

- Laser adapter mount for Nd:YAG Laser (for several models available)
- General-purpose rail-mounted clamp to fix light sheet optics position (when interfaced to the mirror arm)
- Adapter piece for mirror arm (M23x1.5)

### Options

- Different lenses for non-standard wavelength e.g. 266nm for LiF

(\*) Achievable minimum light sheet thickness is a function of the beam diameter, and therefore of the Laser model coupled to the light sheet optic.

