

LASERPULSE™ Light Arm for PIV Model 610015

The LASERPULSE Light Arm safely and precisely delivers a laser light beam, where you need it, for PIV measurements.



What it Does

TSI's LASERPULSE Light Arm is an articulated arm that offers flexibility in delivering the light sheet for PIV measurements or for other high energy laser applications. Featuring a beam path that can be fully enclosed from the laser to the measurement area, it is essential for safely delivering high energy, pulsed YAG laser beams.

For PIV global flow measurements, the measurement plane must often be moved from one location to another. This is accomplished in some cases using an automated traverse. The LASERPULSE Light Arm is an ideal choice since it is compatible with high energy lasers and it allows easy traversing of the light sheet.

How it Works

The LASERPULSE Light Arm incorporates a combination of optical elements into a compact, high-quality articulated arm. For PIV applications, the YAG laser beam is

delivered through TSI light sheet generation optics attached to the arm exit. The lens system included with the arm offers a choice of several laser sheet divergence angles and light sheet thicknesses.

The laser sheet can be positioned easily and smoothly and oriented almost anywhere within a sphere of radius equal to the overall length of the assembly. Standard length is 1.8 meters, but lengths from 0.5 meter to 2.2 meters are available on request.

Beam launching and initial alignment are simplified using an alignment kit provided with the arm. The individual mirrors are factory aligned so that they do not require adjustment. Sealed bearings prevent contamination.

The LASERPULSE Light Arm can be used with all the YAG lasers provided by TSI. The standard mirrors are designed for 532 nm operation.

The Light Arm can be used alone or in combination with a TSI traversing system that offers up to three axes of motion. This facilitates precise, repeatable positioning of the measurement plane. Special arrangements of the light arm are available for underwater applications. Please contact TSI for information regarding your specific requirements.

Specifications

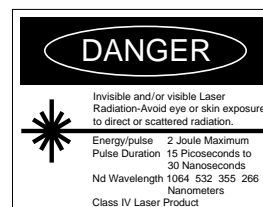
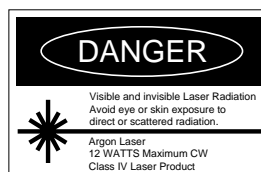
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Rotation 360 degrees at each knuckle
Total length 1.8 m standard
Total weight 7 kg

Specifications subject to change without notice.



LASERPULSE Light Arm with laser (not included).



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