

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.



TSI's LaserPulse Light Arm is an articulated arm that offers flexibility in delivering the light sheet for Particle Image Velocimetry (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.

Applications

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.

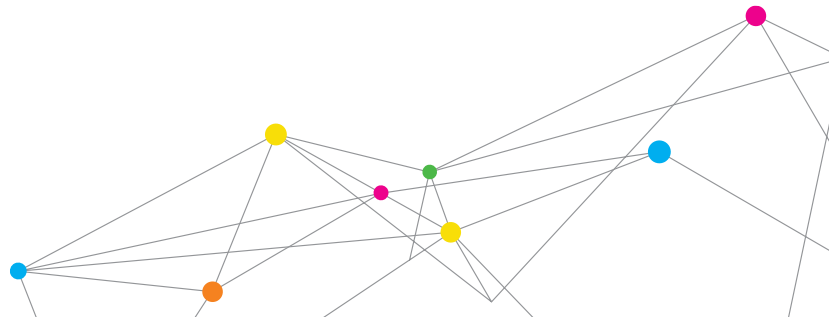
The LaserPulse Light Arm incorporates a combination of optical elements into a compact, high-quality articulated arm. For PIV applications, the YAG laser beam is delivered through TSI light sheet generation optics attached to the arm exit. The lens system included with the arm offers a choice of several laser sheet divergence angles and light sheet thicknesses.

Features and Benefits

- + Safe and accurate beam delivery
- + Experimental flexibility



UNDERSTANDING, ACCELERATED



SPECIFICATIONS

LASERPULSE™ LIGHT ARM FOR PIV MODEL 610015

Rotation

360 degrees at each knuckle

Total length

1.8 m standard

Total weight

7 kg



LaserPulse Light Arm with laser (not included).

Operation

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 are subject to change without notice.

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DANGER

Invisible and/or visible Laser
Radiation-Avoid eye or skin exposure
to direct or scattered radiation.

 Energy/pulse 2 Joule Maximum
Pulse Duration 15 Picoseconds to
30 Nanoseconds
Nd Wavelength 1064 532 355 266
Nanometers
Class IV Laser Product



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TSI Incorporated - Visit our website www.tsi.com for more information.

USA Tel: +1 800 874 2811
UK Tel: +44 149 4 459200
France Tel: +33 4 91 11 87 64
Germany Tel: +49 241 523030

India Tel: +91 80 67877200
China Tel: +86 10 8251 6588
Singapore Tel: +65 6595 6388