Illumination for Light Sheet Applications

High-Speed Imaging

Fire*FLY*500-LS

The compact short-pulsed laser for illumination in light sheet applications

Fire*FLY*500-LS model

Light delivery system for visualising flow, velocity and fluid mechanics

Designed for

Time resolved PIV
High-speed PIV
Standard PIV

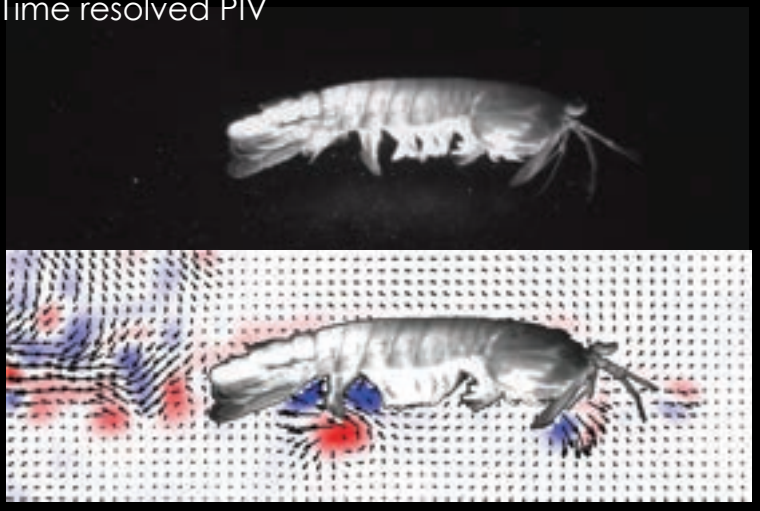
OXFORD LASERS

The light sheet (LS) model

The Fire*FLY*500-LS is designed with PIV in mind. Whether for time resolved, high-speed or standard, the Fire*FLY*500-LS is a compact, affordable and reliable imaging system.

An easy-to-use, flexible light delivery system with a simple interface makes the Fire*FLY*500-LS perfect for illuminating high-speed imaging events in applications for PIV, flow visualisation and fluid mechanics.

Light sheet illumination example - Time resolved PIV



Courtesy: The Murphy Lab, University of South Florida

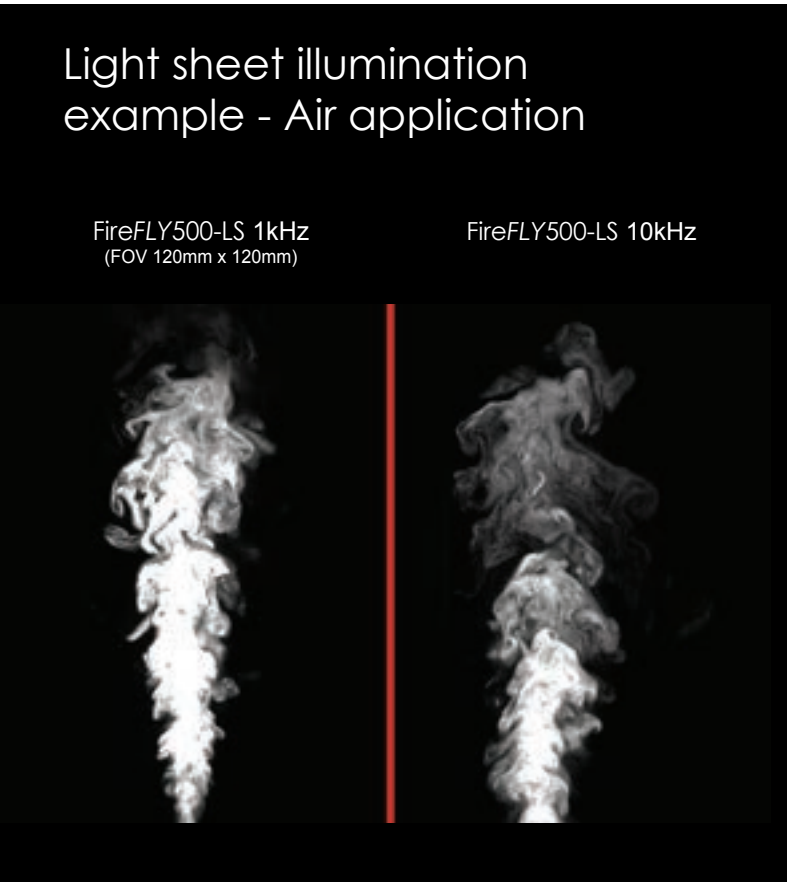
Applications

- Time resolved PIV
- High-speed PIV
- Standard PIV
- Flow visualisation
- Fluid Mechanics
- General high-speed imaging

Features

- High repetition rate to keep up with high-speed events
- Trigger easily from any camera, high speed or low speed
- Fully sealed air cooled laser head.

Light sheet illumination example - Air application



Technical Specifications

Name	Fire*FLY*500-LS laser
Wavelength	808nm
Laser Power	500W (at the diode)
Pulse Duration Range	50ns - 100µs (1% duty cycle limited)
Minimum Separation	330ns
Maximum Pulse Frequency	10,000Hz
Number of pulses per burst	254
Laser Class	laser class 4
Voltage	100 to 240VAC
Frequency	50/60Hz
Dimensions	
Head	205mm x 125mm x 70mm
Controller	270mm x 200mm x 65mm

For over 40 years, Oxford Lasers have been working at the leading edge of laser technology. Providing products and services to a variety of industries for the advancement of production processes, R&D and development applications.

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Contact Us

www.oxfordlasers.com

OXFORD LASERS LTD.
Unit 8, Moorbrook Park, Didcot, Oxon, OX11 7HP
United Kingdom
Tel: +44 (0) 1235 810088
oxford.ltd@oxfordlasers.com

OXFORD LASERS INC.
2 Shaker Road, Unit A101
Shirley, MA 01464, USA
Tel: +1 (978) 425 0755
oxford.inc@oxfordlasers.com