

Versatile Illumination system

High-Speed Imaging

FireFLY500-S

Illumination for Diverse Imaging Applications

Short-pulsed laser light source for general high-speed imaging with flexible options



FireFLY500-S model

The compact,
short-pulsed laser
light source from
Oxford Lasers



Multiple light delivery options

Wide range of
accessories
available



Affordable, Compact, Flexible, Robust and Reliable.
The FireFLY500-S is our most versatile short-pulsed
laser illumination model.

Designed with a simple interface that syncs with
high-speed camera systems, it is a flexible light
delivery system ensuring ease of use over a diverse
range of imaging techniques.

With accessory options, it allows you to tailor
the illumination to the application requirements
for imaging of high-speed events.

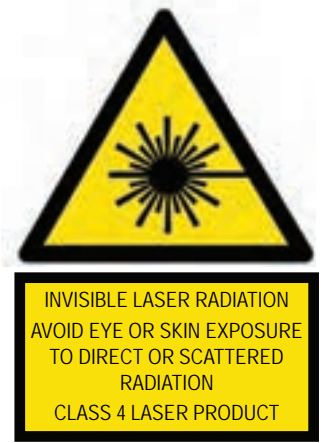


Applications

- General high-speed imaging
- Particle sizing
- Spray diagnostics
- Digital image correlation (DIC)
- Schlieren imaging
- Bright events - Industrial welding processes
- NDT testing
- Fluid mechanics
- Bio-locomotion

Features

- High output power for bright subject illumination
- 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.



Accessory and upgrade options



| <i>Name</i> | <i>Part number</i> |
|------------------------------|--------------------|
| Large area diffuser | SSO0004 |
| Light guide delivery | POF0042 |
| Waterproof upgrade | PHZ0008 |
| Diffuser for particle sizing | POZ0002 |
| Band pass filter 50mm | SIA2025 |
| Laser safe goggles | POG0019 |

Technical Specifications

| | |
|----------------------------|--------------------------------------|
| Name | FireFLY500-S laser |
| Wavelength | 808nm |
| Laser Power | 500W (at the diode) |
| Pulse Duration Range | 50ns - 100µs (1% duty cycle limited) |
| Minimum Separation | 330ns |
| Maximum Pulse Frequency | 100,000Hz |
| Burst frequency | 3,000,000Hz |
| 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 45 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.

Contact Us

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