

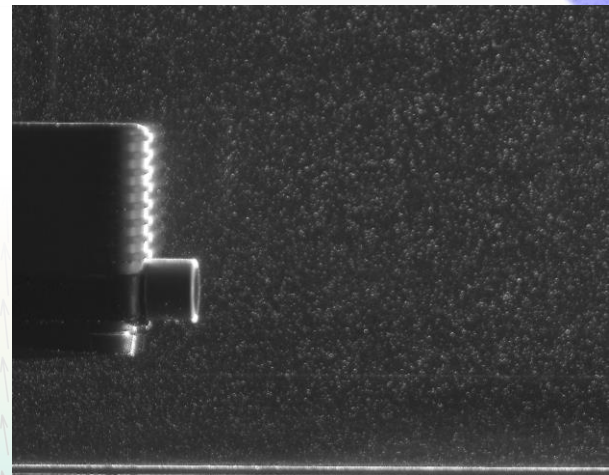
LD-PIV

OPTOLUTION Messtechnik GmbH

Pulsed laser diodes can be used for PIV illumination. The OPTOLUTION LD-PIV is a low-cost and easy to operate solution for PIV studies with relatively small illuminated areas and relatively low speed flow.

Main Features:

- Designed for double image PIV
- Synchronizer for pco cameras (panda and pixelfly) included
- Wireless remote control (e.g. from PIVlab)
- Fully supported by PIVlab
- Thin laser sheet (< 1 mm)
- Very low power consumption (< 500 mA)
- Powered by any standard USB-C power supply or power pack
- Cost-effective and compact design
- Optical (CW) output power 5 W or 20 W (specify on order)
- Wavelength: 450 nm (blue)
- Pulse length: 25 μ s – 10 ms
- Duty cycle: 0 – 5 %
- Repetition rate: 1 – 50 Hz
- Interframe time: 5 μ s – 500 ms
- Typical PIV application (5 W version):
 - Water: velocities up to 2.5 m/s and illuminated area up to 300 x 200 mm
 - Air: velocities up to 1.5 m/s and illuminated area up to 200 x 150 mm
- Typical PIV application (20 W version):
 - Water: tbd
 - Air: tbd



Example image (5 W version):
300 μ s pulse, 300 x 200 mm illuminated area
pco.panda 26 DS, no binning