LS-2132 PIV

Compact Nd:YAG Laser for Particle Image Velocimetry

LS-2132 PIV is a compact dual pulse laser with precise tuning delay between output pulses for PIV and other kinetic applications.

Main features:

-Small foot-print laser head design.

-Integrated one-body power supply and cooling system with water-to air heat exchanger.

-Output of two pulses with equivalent energy, beam quality.

-Precise tuning of two pulses delay from 1 microsecond to 50 milliseconds using internal control.

-Any delay between pulses using external control and built-in TTL interface.

-High stability and durability of the output parameters are provided by special temperature control of nonlinear and Q-switched crystals as well as laser resonator special design.

- Built-in variable attenuator (option) of output energy.

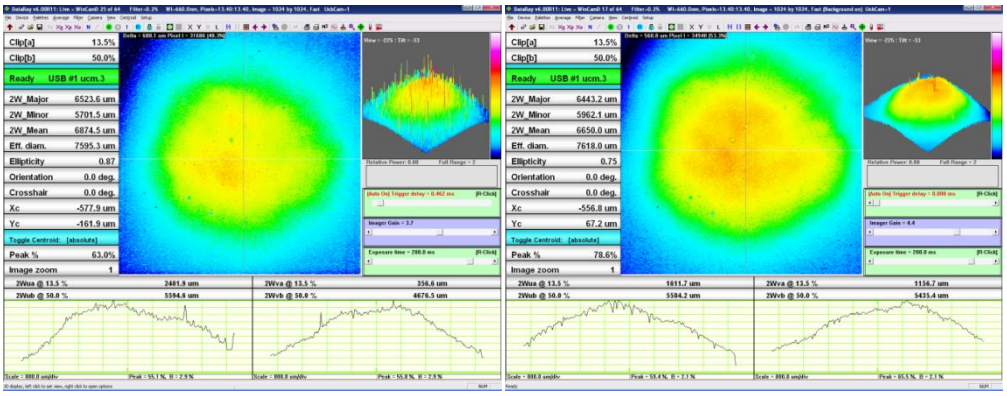
- Internal probes of 1064 nm energy (option).

- Compatible with C-mount (option).

Specification

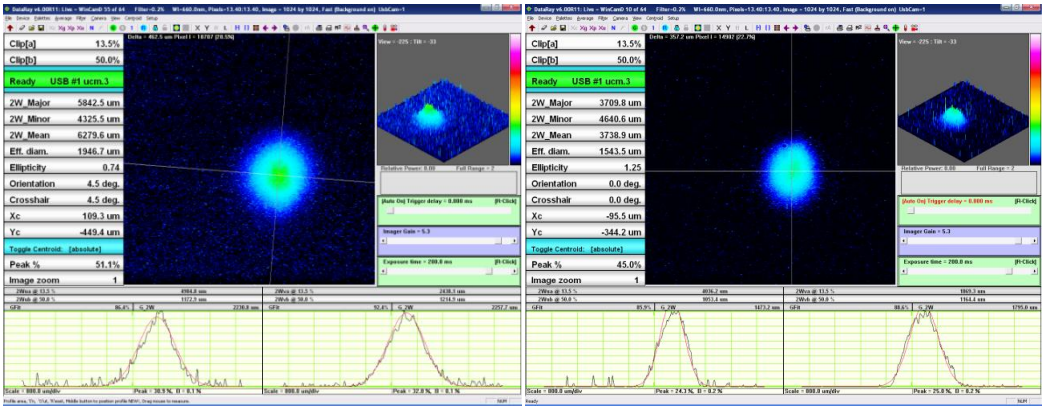
Parameter	LS-2132 PIV
Energy at 532 nm, mJ	100 (each pulse)
Pulse duration (FWHM), ns	≤5
Pulse repetition rate, Hz	20
Beam divergence ($\Theta_{0.86}$), mrad	≤3
Beam diameter, mm	≤5
Separation between pulses	1 μs-50 ms (step 1 μs)
Jitter, ns	±1
Energy stability (rms), %	<1
Polarization	Linear horizontal
Size L x W x H, mm Laser head Power supply and cooling system	 176 x 416 x 121 (10 kg) 252 x 445 x 465 (25 kg)
Input Power requirements	Single phase, 100-240 V, 50/60 Hz, universal input 15A at 100V 10A at 220V

Specification is subject to change without notice



Channel 1 Channel 2

Beam profiles, near field (532 nm, 100 mJ, at 1,5 m from laser emitter aperture)



Channel 1 Channel 2

Beam profiles, far field (532 nm, 100 mJ in focal plane of lens F=1250 мм)