LS-2132PIV and LS-2145PIV

Compact Laser for Particle Image Velocimetry

LS-2132PIV and LS-2145PIV are compact dual pulse lasers 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.

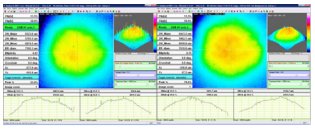
-Output of two pulses with equivalent energy, beam quality.

-Precise tuning of two pulses delay from 1 microsecond to 100 milliseconds using internal control.

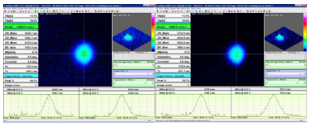
-Any delay between pulses using external control and built-in TTL interface.

-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).



Channel 1 Channel 2
Beam profiles, near field (532 nm, 100 mJ, at 1.5 m from laser emitter)



Channel 1 Channel 2
Beam profiles, far field (532 nm, 100 mJ, in focal planeof lens F=1250 mm)

Specifications[1]

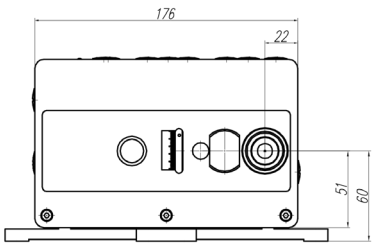
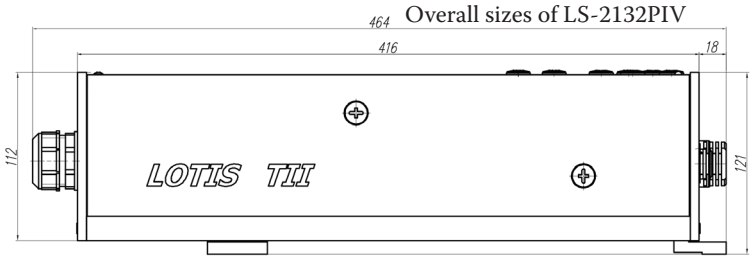
Model	LS-2132PIV	LS-2145PIV
Energy at 532 nm, mJ at 355 nm, mJ	2x100 2x25[4]	2x300
Pulse duration (FWHM), ns	≤5	6-7
Pulse repetition rate, Hz	20	10
Beam divergence ($\Theta_{0.86}$), mrad	≤3.5	
Beam diameter, mm	≤5	≤8
Delay between pulses[3]	0-50 ms	0-100 ms
Jitter[2], ns	±1.0	±1.5
Energy stability (StDev), %	≤1.0	
Polarization	Linear horizontal	
Size LxWxH, mm (Weight,kg) Laser head Power supply LPS-2232M Remote Control	 416x176x121 (10.0) 461x276x504 (26.0) 105x175 (0.5)	 462x234x125 (12.0) 461x276x504 (26.0) 105x175 (0.5)
Input Power requirements	Single phase, 100-220 V, 50/60 Hz, universal input 15 A at 100V, 10 A at 220V	

[1] *All specifications are subject to change without notice*

[2] *With respect to external trigger of Q-switch*

[3] *Any delay between pulses using external triggering*

[4] *Laser Head size 500x176x121 mm*



Overall sizes of LS-2132PIV