

# LS-2145 PIV

Compact Nd:YAG Laser for Particle Image Velocimetry

LS-2145 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.
- 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.
- Compatible with C-mount (option).



## Specification

Parameter	LS-2145 PIV
Energy at 532 nm, mJ	≥300 (each pulse)
Pulse duration (FWHM), ns	6-7
Pulse repetition rate, Hz	10
Beam divergence ( $\theta_{0.86}$ ), mrad	≤2.5
Beam diameter, mm	≤6
Separation between pulses	1 μs-100 ms
Jitter, ns	±1
Energy stability (rms), %	<1
Polarization	Linear horizontal
Size L x W x H, mm	
Laser head	234x 462 x 125 (12 kg)
Power supply and cooling system	252 x 445 x 465 (25 kg)
Input Power requirements	Single phase, 100-240 V, 50/60 Hz, universal input 15A at 100V

Specification is subject to change without notice

