

LS-2131D, LS-2134D AND LS-2145D



Double pulsed Q-switched Nd:YAG lasers are designed to provide highly stable, nanosecond pulsed IR, green and UV radiation for Particle Image Velocimetry (PIV), Laser Induced Breakdown Spectroscopy (LIBS) and other kinetic applications.

These compact double pulsed lasers (DPL) are designed with a unique laser head: two independent laser resonators pumped by a single flash lamp are integrated in one laser emitter. A single power supply and cooling unit (with water-to-air heat exchanger) are used in the DPL. Ease of use is provided through multiple triggering:

- single-shot push button trigger and continuous internal trigger from remote control,
- external TTL trigger,
- computer-controlled laser operation via RS-232

port.

These DPLs combine the reliability and rigidity of LS-2131-2134 lasers with operation in dual pulse mode: two output pulses of equivalent energy; polarization and high beam uniformity. Dual output ports allow each oscillator to operate independently when necessary.

DPL can be fit with harmonic generators and tunable solid state lasers.

SPECIFICATIONS¹

Model	LS-2131D	LS-2134D	LS-2145D	
Energy, mJ	1064 nm 532 nm	100 50	200 110	320 190
Pulse duration (FWHM), ns	12-15	12-15	12-15	
Pulse repetition rate, Hz	15	10	10	
Beam divergence, mrad (full angle for 86% of energy)	1.5	2.5	2.5	
Beam diameter, mm	4	6.3	6.3	
Delay between laser pulses ² , μ s	0-80			
Jitter ³ , ns	± 1.0			
Energy stability 1064 nm (rms), %	± 3.0			
Size LxWxH, mm (Weight, kg)	Laser Head Power Supply Cooling System Remote Control	770x306x143 (21.0) 391x364x192 (16.5) 391x364x280 (15.5) 105x175 (0.5)		
Power requirements	Single Phase, 220 \pm 20V, 50/60 Hz, 850 VA			

¹ All specifications are subject to change without notice

² 1 μ s-steps, other steps (1-100 ns) are available on request

³ With respect to external trigger of Q-switch

