

LS-2147A High energy Nd:YAG Laser



LS-2147A is new improved model of LOTIS high power lasers. Laser consists of two independent modules: oscillator and power amplifier. The special design of pump chambers suppresses undesired parasitic super luminescence oscillations that limit output energy.

Laser has built-in second harmonic and is supplied with external third and fourth harmonics units (HG-T, HG-F).

Features & benefits:

- Compact design
- High energy UV output (355, 266 nm)
- Automatically changing output wavelength with color coded LED indicators of operating mode
- Remote control and PC control of laser parameters (Pockels cell control, oscillator/amplifier delay, pump

Specification

Parameter	Value	
Energy, mJ	1064 nm	1400
	532 nm	700
	355 nm*	300
	266 nm*	180
Pulse duration (FWHM at 1064 nm), ns	7-12	
Pulse repetition rate, Hz	10	
Beam divergence, mrad	≤1.5	
Beam diameter, mm	≤10.0	
Jitter**, ns	±1.0	
Energy stability*** (1064 nm), %	±3.0	
Size L x W x H, mm (Weight, kg)	Laser head	705 x 306 x 143 (38.0)
	2 x Power supply	386 x 449 x 177 (16.0)
	2 x Cooling system	386 x 449 x 280 (16.0)
	Remote control	105 x 175 (0.5)
	HG-T Unit	150 x 340 x 125 (5.0)
	HG-F Unit	330 x 190 x 125 (5.0)
Power requirements	Single phase, 220±20 V, 50-60 Hz, 2000 W	

* with external harmonic generators

** with respect to external trigger of Q-switch

*** shot to shot for 99% of pulses