

Minilite™ The Entry Level Nd:YAG Laser System



MINILITE™ FEATURES & BENEFITS

Can be operated locally or remotely via TTL interface

No need for an external water hook-up, the system is completely self-contained

Easy flashlamp replacement without alignment of the laser oscillator

Invar resonator structure ensures long-term thermal and mechanical stability

Variable attenuator included

FLASHLAMP PUMPED Nd:YAG

MINILITE™ SPECIFICATIONS

DESCRIPTION	MINILITE™ I	MINILITE™ II
Repetition Rate (Hz)	1-15	1-15
Energy (mj)		
1064 nm	28	50
532 nm	12	25
355 nm	4	8
266 nm	2	4
Pulsewidth ¹ (nsec)		
1064 nm	5-7	5-7
532 nm	3-5	3-5
355 nm	3-5	3-5
266 nm	3-5	3-5
Linewidth (cm ⁻¹)	1	1
Divergence ² (mrad)	< 3	< 3
Rod Diameter (mm)	3	3
Jitter ³ (±ns)	0.5	0.5
Energy Stability ⁴ (±%)		
1064 nm	2; 0.6	2; 0.6
532 nm	3; 1.0	3; 1.0
355 nm	4; 1.3	4; 1.3
266 nm	8; 2.6	8; 2.6
Polarization		
1064 nm	HORIZONTAL	HORIZONTAL
532 nm	VERTICAL	VERTICAL
355 nm	HORIZONTAL	HORIZONTAL
266 nm	HORIZONTAL	HORIZONTAL

Minilite™ - Continuum's entry level Q-switched Nd:YAG laser system

The Minilite™ series of pulsed Q-switched laser systems provides high levels of performance while maintaining a very reasonable price point. The Minilite™ is designed for new and existing users of pulsed lasers allowing easy operation, simple external control and compact size. Minilites are used for remote sensing, sample testing, mass spectroscopy, LIF and laser flash photolysis.

NOTES

1. Full width half max
2. Full angle for 86% (1/e²) of energy
3. With respect to external trigger
4. The first value represents shot-to-shot for 99.9% of pulses, the second value represents RMS.

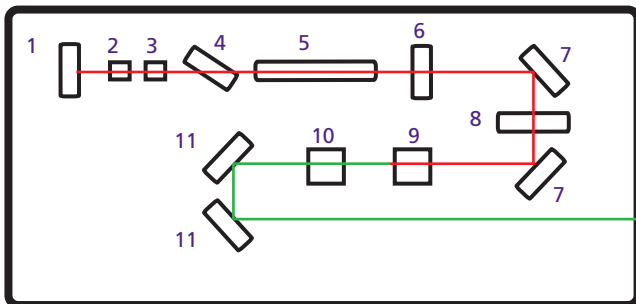
All specifications at 1064 nm unless otherwise noted. As a part of our continuous improvement program, all specifications are subject to change without notice.

The Minilite™ platforms offer user accessible harmonic generators, integrated energy attenuator and simple operation. The Minilite™ I and II uses a single YAG rod/flashlamp pump chamber, invar resonator, and a stable resonator design which offers maximum energy extraction and excellent beam quality.

MECHANICAL AND UTILITIES

Size	Optical Head (L x W x H)	267 x 172 x 63.5 mm (10.5 x 6.75 x 2.5 in.)
	Power Supply (L x W x H)	380 x 197 x 356 mm (15 x 7.75 x 14 in.)
Weight	Optical Head	3.6 kg (8 lbs)
	Power Supply	14.5 kg (32 lbs)
Water Service		Closed loop water to air heat exchanger: external cooling water not required (10 oz. deionized water)
Electrical Service (Specify on Order)		110 V (3 A)
		220 V (1.5 A) 50/60 Hz
Room Temperature		18.3 to 29.4° C (60 to 85° F)
Umbilical Length		3.0 m (9 ft 10 in.)

MINILITE™ OPTICAL LAYOUT



1. Rear Mirror
2. Pockels Cell
3. 1/4 Wave Plate
4. Dielectric Polarizer
5. Rod
6. Output Coupler
7. IR Mirror
8. Attenuator
9. Second Harmonic Generator
10. Third or Fourth Harmonic Generators
11. 532, 355 or 266 nm Mirrors

MINILITE™ PHYSICAL LAYOUT
All dimensions in mm (inches)

