

LAMBER-C series

High energy flashlamp-pumped Nd:YAG ns-laser



LAMBER-C laser systems offer up to 6J Q-switched linear polarized output with RS232 software control. High energy and nanosecond pulse duration provide high intensity pulses, low transverse field modulations to have a rather uniform energy distribution.

FEATURES

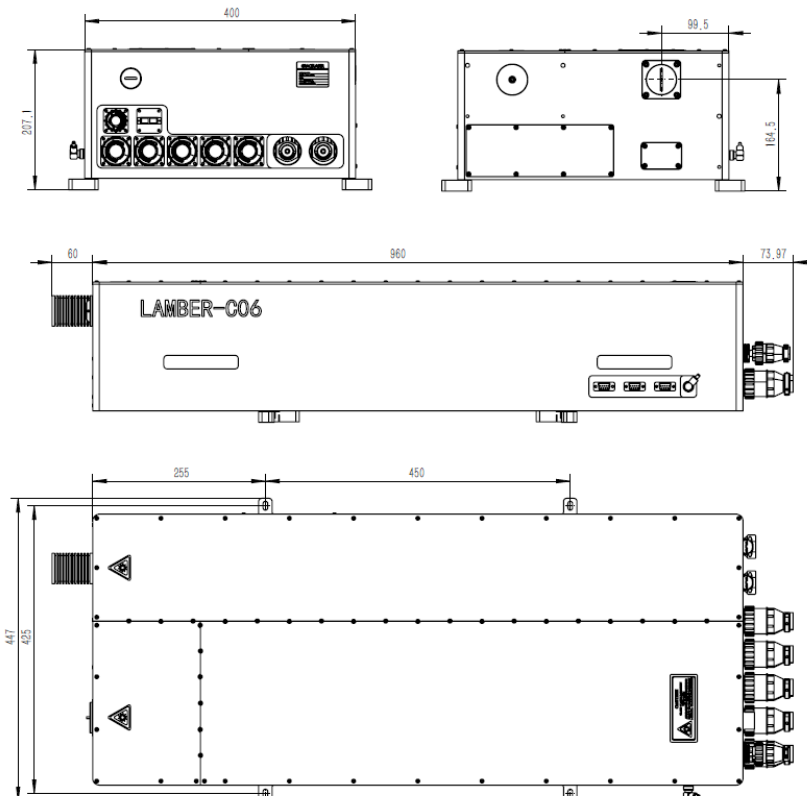
- **2-6J** at 1064nm / Harmonics from 532nm to 266nm
- **1-10Hz** repetition rate / **8-10 ns** pulse duration
- Incorporate Gaussian Mirror to provide outstanding Top hat spatial profile
- Compact and rugged industrial laser head design
- Injection seeded single longitudinal mode (SLM) option
- Output Faraday rotation isolator option

APPLICATIONS

- Laser shock peening processing
- Material damage threshold research
- Large area ablation
- Plasma physics
- Pumping for Ti:Sapphire
- Silicon annealing

LAMBER-C06 Laser Head
Mechanical Specifications

Unit:mm



LAMBER-C series Specifications



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Beam characteristics

Version	LAMBER-C02	LAMBER-C03	LAMBER-C05	LAMBER-C06
Repetition Rate ¹ (Hz)	1-10Hz			
Energy (mJ)				
1064nm	2000	3000	5000	6000
532nm	1000	1500	2500	3000
355nm	600	900	1500	1800
266nm	170	250	430	520
Energy Stability RMS (%)				
1064nm	1%			
532nm	2%			
355nm	3%			
266nm	3.5%			
Pulsewidth FWHM ² (ns)	8-10ns @1064nm(18-22ns optional for LSP application with rise time<5ns)			
Divergence ³ (mrad)	<0.5mrad			
Pointing Stability ⁴ (μrad)	<20μrad			
Timing Jitter RMS ⁵ (ns)	<0.5ns			
Beam Diameter (mm)	~11	~13	~16	~18
Beam Spatial Profile	Top hat			
Near Field Fit to Gaussian<1m	70%			
Far Field Fit to Gaussian (∞)	95%			
Polarization	linear			
Linewidth (cm ⁻¹)				
Standard	1			
Injection Seeded SLM ⁶	0.005			

General characteristics

AC Input	220 VAC ±5% 50-60Hz
Power Consumption	<3kW (typical 2J at10Hz)
Operating Conditions	Temperature 5-35°C Humidity <80%

NOTES

- 1.All specifications at 1064nm and maximum repetition rate unless otherwise noted.
- 2.Full width at half maximum.
- 3.Full angle for 86.5% of energy.
- 4.Maximum deviation from beam mean centroid.
- 5.With respect to external trigger.
- 6.Injection seeded version reduces energy by 10%.

China

Grace Laser Technology Co., Ltd.

Building 16, No.8 Anping North Street, Shunyi District, Beijing 101318 China

Tel: +86 010 60401920 Fax: +86 01 60401720 Email: sales@gracelaser.com

www.gracelaser.com

