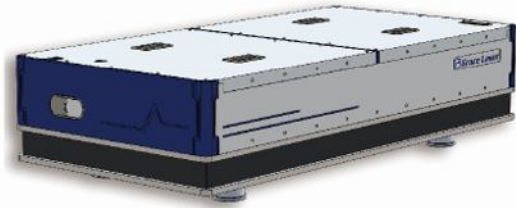




LAMBER series

High energy flashlamp-pumped Nd:YAG ns-laser



FEATURES

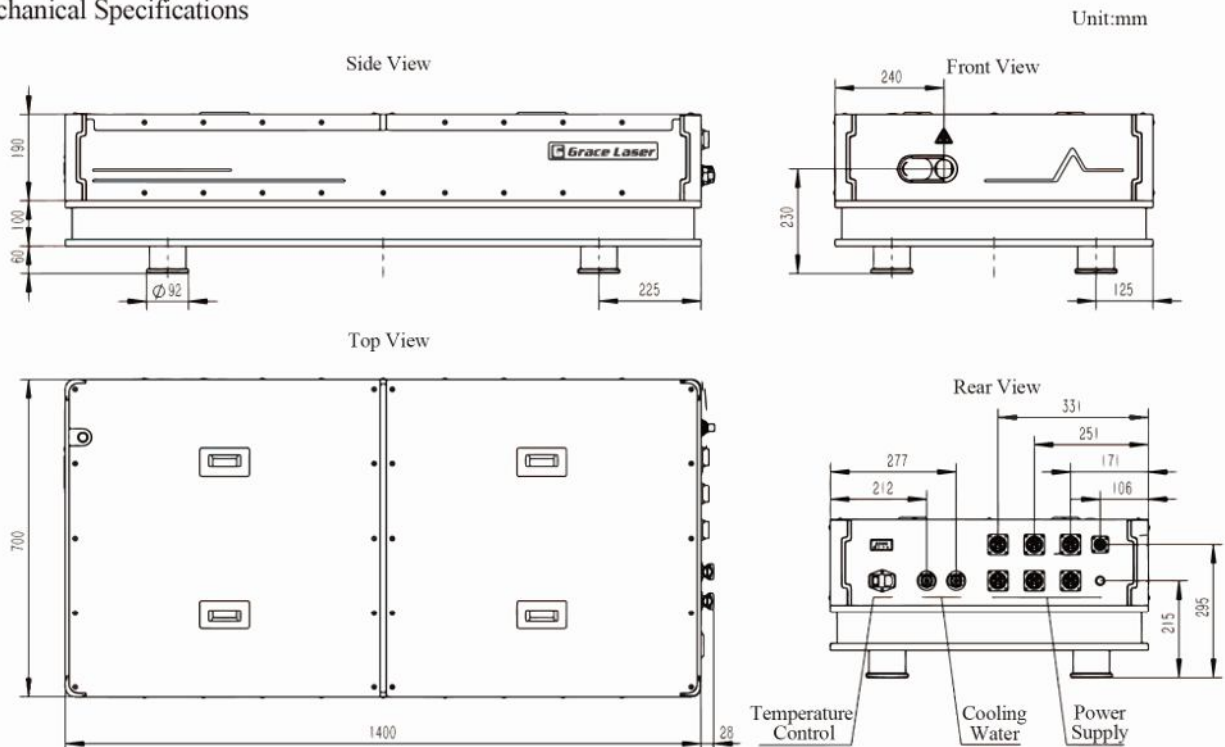
- 6-24J at 1064nm / Harmonics from 532nm to 355nm
- 10 / 5 / 1Hz repetition rate / 8-25 ns pulse duration
- Incorporate Gaussian Mirror to provide outstanding Top hat spatial profile
- Compact and rugged industrial laser head design
- Injection seeded single longitudinal mode (SLM) option
- Output Faraday rotation isolator option

LAMBER laser systems offer up to 24J 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.

APPLICATIONS

- Laser shock peening processing
- Material damage threshold research
- Large area ablation
- Plasma physics
- Silicon annealing

LAMBER-08 Laser Head Mechanical Specifications



High energy flashlamp-pumped Nd:YAG ns-laser

Beam characteristics

Version	LAMBER-06	LAMBER-08	LAMBER-H10	LAMBER-H12	LAMBER-H24
Repetition Rate ¹ (Hz)	1-10Hz		1-5Hz		1Hz
Energy (J)					
1064nm	6	8	10	12	24
532nm	3	4.5	5.5	7	14
355nm	1.5	2	2.5	3	6
Energy Stability RMS (%)					
1064nm	0.7%				
532nm	1.2%				
355nm	1.7%				
Pulsewidth FWHM ² (ns)	8-25ns @1064nm				
Divergence ³ (mrad)	<0.5mrad				
Pointing Stability ⁴ (μrad)	±50μrad				
Timing Jitter RMS ⁵ (ns)	<0.5ns				
Beam Diameter (mm)	~18	~20	~22	~25	~33
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	380 VAC ±5% 50-60Hz
Power Consumption	<10kW (typical 12J at 5Hz)
Operating Conditions	Temperature 10-30°C Humidity <60%

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

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