

NASOR series

Flashlamp-pumped Nd:YAG ns-laser



FEATURES

- 200-1200mJ at 1064nm/Harmonics from 532nm to 266nm
- 10-30 Hz repetition rate / 6-8 ns pulse duration
- Incorporate Gaussian Mirror to provide outstanding Top hat spatial profile
- Injection seeded single longitudinal mode (SLM) option
- Compact and reliable resonator structure ensures long-term thermal and mechanical stability

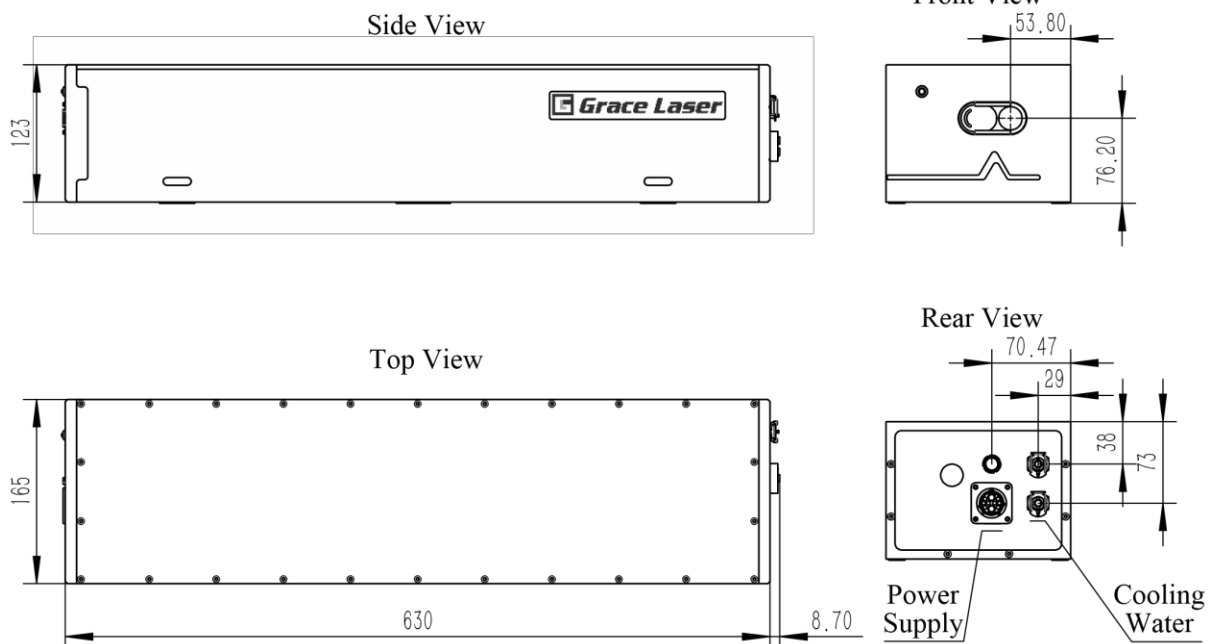
NASOR laser series all feature an efficient single Nd:YAG rod oscillator design, and Gaussian Mirror coupled flat top output. Compact, hermetic and robust resonator structure contribute to NASOR lasers' long term high performance and reliability.

APPLICATIONS

- Material processing
- Laser spectroscopy
- OPO, Ti:Sapphire, dye laser pumping
- Remote sensing
- Biological investigations

NASOR-800 Laser Head Mechanical Specifications

Unit:mm



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Beam Parameter

Version	NASOR-200	NASOR-400	NASOR-600	NASOR-800	NASOR-H1200
Repetition Rate ¹ (Hz)	10-30Hz		10-20Hz		1-10Hz
Energy(mJ)					
1064nm	200	400	600	800	1200
532nm	100	200	300	400	600
355nm	50	100	180	240	360
266nm	20	40	60	80	120
Energy Stability RMS(%)					
1064nm	1%				
532nm	1.5%				
355nm	2.5%				
266nm	3.5%				
Power Drift ² (%)					
1064nm	3%				
532nm	5%				
355nm	8%				
266nm	10%				
Pulsewidth FWHM ³ (ns)	6-8ns @ 1064nm				
Divergence ⁴ (mrad)	<0.6mrad				
Beam Pointing Stability ⁵ (μ rad)	\pm 50 μ rad				
Timing Jitter RMS ⁶ (ns)	<0.5ns				
Beam Diameter(mm)	~6	~7	~8	~9	~10
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 ⁷	0.005				

General characteristics

AC Input	220 VAC \pm 5% 50 -60Hz
Power Consumption	<1.8kW (typical 800mJ at 10Hz)
Operating Conditions	Temperature 10-30 $^{\circ}$ C Humidity <60%

NOTES

- 1.All specifications at 1064nm and 10Hz repetition rate unless otherwise noted.
- 2.Average in 8 hours with room temperature variation $\delta T < 3^{\circ}\text{C}$.
- 3.Full width at half maximum.
- 4.Full angle for 86.5% of energy.
- 5.Maximum deviation from beam mean centroid.
- 6.With respect to external trigger.
- 7.Injection seeded version reduces energy by 10%.

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