

NASOR Series

Flashlamp-pumped Nd:YAG Laser



FEATURES

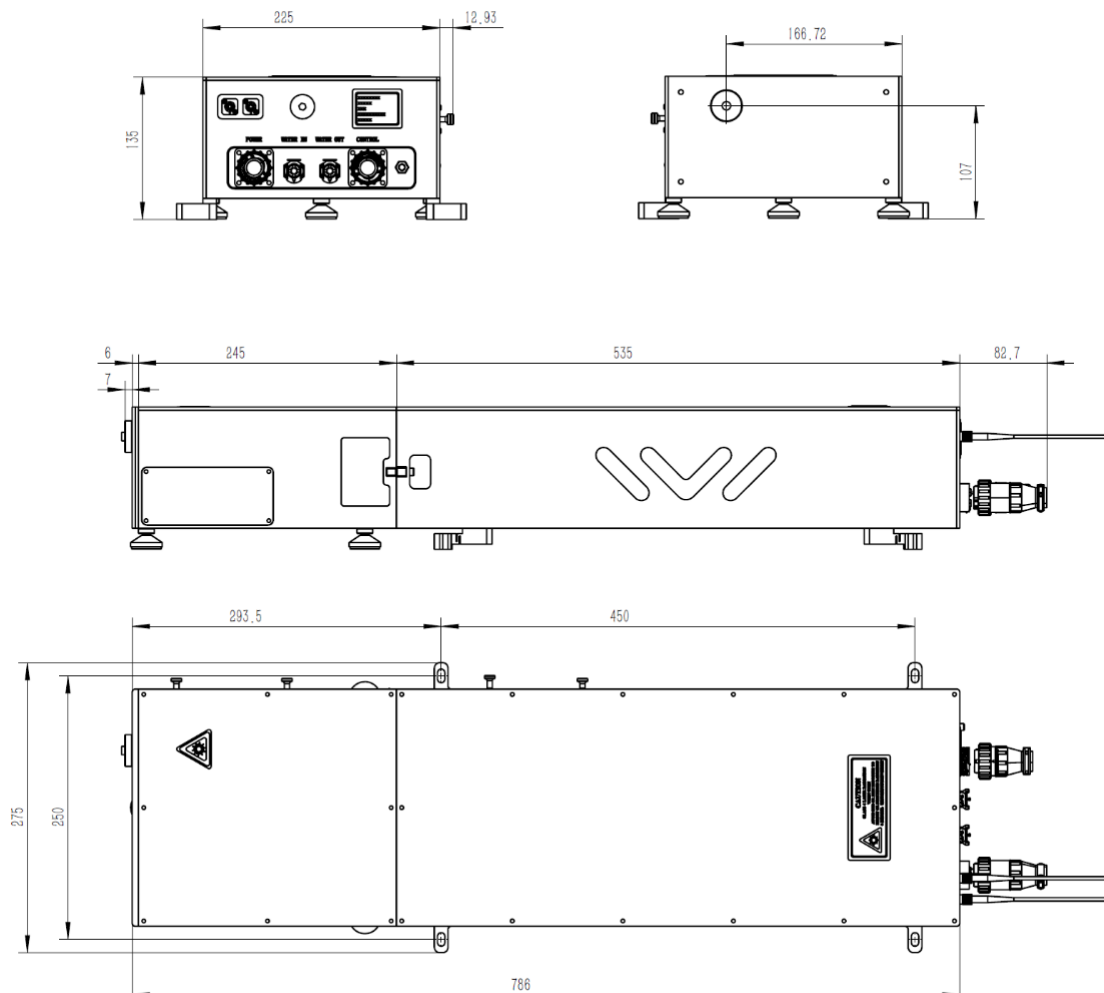
- 200-1200mJ at 1064nm/Harmonics from 532nm to 266nm
- 1-10 Hz repetition rate / 6-8 ns pulse duration
- Incorporate Gaussian Mirror to provide outstanding Top hat spatial profile
- Injection seeded single longitudinal mode (SLM) option
- Compact and reliable resonator structure ensures long-term thermal and mechanical stability

APPLICATIONS

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

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

NASOR-1200 Laser Head(THG/FHG) Mechanical Specifications



NASOR Series Specifications



Flashlamp-pumped Nd:YAG Laser

Beam characteristics

Version	NASOR-400	NASOR-600	NASOR-800	NASOR-1000	NASOR-1200
Repetition Rate ¹ (Hz)	1-10Hz				
Repetition options (Hz)	20-50Hz available for Lamp-pumped, 100Hz available for Diode-pumped models				
Energy (mJ)					
1064nm	400	600	800	1000	1200
532nm	200	300	400	500	600
355nm	100	180	240	300	360
266nm	40	60	80	100	120
Energy Stability RMS (%)					
1064nm	<1%				
532nm	<1.5%				
355nm	<2.5%				
266nm	<3.5%				
Pulsewidth FWHM ³ (ns)	6-9ns @1064nm				
Divergence ⁴ (mrad)	<0.5mrad				
Beam Pointing Stability ⁵ (μrad)	<20μrad				
Timing Jitter RMS ⁶ (ns)	<0.5ns				
Beam Diameter (mm)	~7	~8	~8	~9	~10
Beam Spatial Profile ⁷	VRM, Top hat				
Polarization	linear				
Linewidth (cm ⁻¹)					
Standard	1				
Injection Seeded SLM ⁸	0.005				
General characteristics					
Flashlamp life time	>50 million pulses				
AC Input	220 VAC ±5% 50-60Hz				
Power Consumption	<2kW (typical 1.2J at 10Hz)				
Warm up time	15 minutes				
Operating Conditions	Temperature 10-30°C Humidity <60%				

NOTES

- All specifications at 1064nm and 10Hz repetition rate unless otherwise noted.
- Average in 8 hours with room temperature variation $\delta T < 3^{\circ}\text{C}$.
- Full width at half maximum.
- Full angle for 86.5% of energy.
- Maximum deviation from beam mean centroid.
- With respect to external trigger.
- Multimode optional, divergence and pulse width will be increased than VRM.
- 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: +86 010-60401720 Email: sales@gracelaser.com

www.gracelaser.com

