

## NANO UV LASER

# S9 | S9-F series 3W-10W UV Laser

NEW



MINIMUM SIZE



HIGH PRECISION



EXCELLENT STABILITY

To meet the market demand, RFH newly developed S9 series solid state pulsed UV laser in 2020. Comparing with its kinds, S9 series solid state pulsed UV laser features more compact and delicate design with more stable laser output. Its compact design suggests no necessity in building big light path, which reduces space and cost to a great extent and makes it easy to be installed into marking on the fly laser systems. In addition, S9 series UV laser has more stable laser cavity of better extensibility, which means the same laser cavity can be made into lasers of different powers with stability greatly improved.



## FEATURES

- Laser wavelength at 354.7nm, repetition rates cover a wide range(single pulse to 200kHz ) ; laser power ranging from 3.0w-10.0w;
- Exceptional beam quality ( $M^2 < 1.2$ ) , absolutely assured in all repetition rates; relatively short pulse width  $< 12\text{ns}@30$  with little heat transfer to surrounding material; perfect beam spot quality(Beam Circularity $> 90\%$ ) ;
- Unique Q-switching technology, adapts a variety of control requirements of laser applications;
- Online refreshment for harmonic coupling technology; Excellent long term power stability ;
- Digital control technology for the driver, enables user to command through RS232 ;
- This laser adopts one - style design with compact and reasonable structure, easy installation.

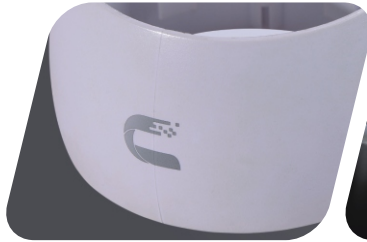
## PARAMETER

PARAMETER	INDEX	DESCRIPTION
Laser wavelength	354.7nm	
Average Output Power	3.0-10.0W	@30kHz
Pulse Width	$< 12\text{ns}$	@30kHz
Pulse Repetition Rate	10-200kHz	
Spatial Mode	TEM00	
$M^2$	$< 1.2$	
Beam Diameter	$0.8 \pm 0.2\text{mm}$	Measured at window
Beam Full Divergence Angle	$< 2\text{mrad}$	
Beam Circularity	$> 90\%$	
Pulse-to-Pulse Stability	$< 2\%$	RMS/@30kHz
Average Power Stability	$< 5\%$	RMS/8hr
Beam-Pointing Drift	$< 30\mu\text{rad}/^\circ\text{C}$	
Polarization Ratio	$> 100:1$	
Polarization Orientation	Horizontal	
Operating Temp. & RH	$10^\circ\text{C}$ to $35^\circ\text{C}$	
	$< 80\%$	
Storage Temp. & RH	$-20^\circ\text{C}$ to $65^\circ\text{C}$	
	$< 90\%$	
Electricity Requirement	100-240VAC	Single phase
	50/60Hz	
Power Consumption	$< 500\text{W}$	
Warranty	18months	

Laser power and other characteristics can be optimized in different repetition frequency ranges ;  
The temperature referred to is the ambient temperature.

## Application

Products of this series are specifically designed for laser marking machine, high precision cutting machine, high precision drilling machine, laser wire stripping machine, glass inner engraving machine, SLA 3D printer and so on.



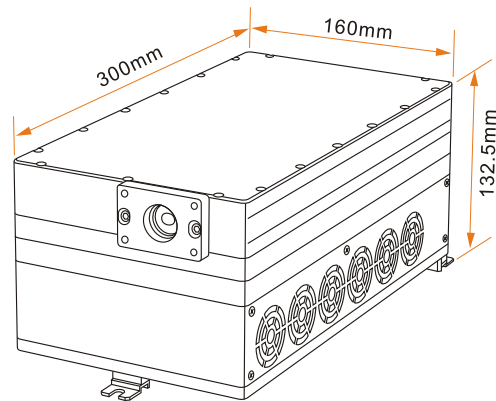
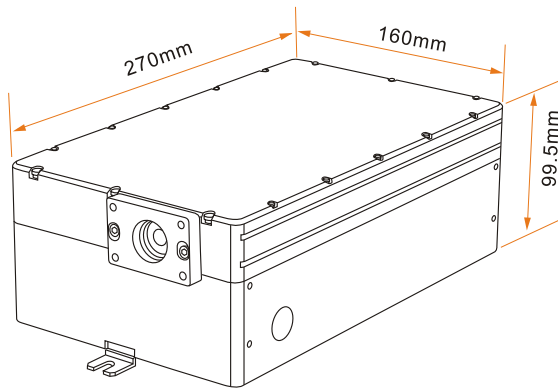
Electronic products



Rapid prototyping



Plastic bottle



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