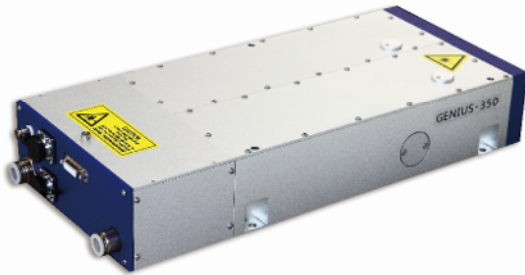


## GENIUS series

### Quasi-CW 355nm ps-laser



#### FEATURES

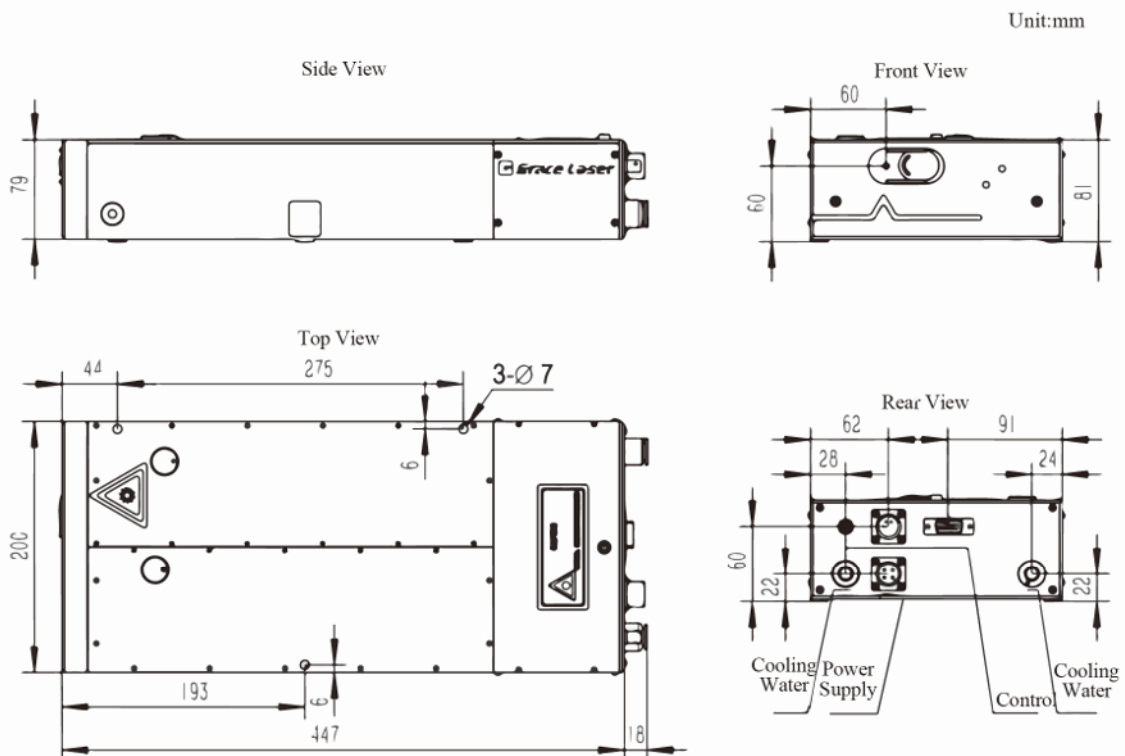
- 150-350mW at 355nm
- 80MHz repetition rate / 12 ps pulse duration
- High beam quality  $M^2 < 1.3$
- Compact, sealed and rugged industrial grade 24/7 operation platform ensures outstanding beam performance and long term power stability
- RS232 interface for remote operation

*GENIUS series offers DPSS quasi-CW 355nm picoseconds lasers. Provide preventative maintenance adjustment of THG crystal and SAM to extends lasers' operating life.*

#### APPLICATIONS

- Semiconductor wafer inspection
- Cell sorting
- Micro material processing
- Micro stereo lithography

#### GENIUS-350 Laser Head Mechanical Specifications



## Quasi-CW 355nm ps-laser

### Beam characteristics

Version	GENIUS-150	GENIUS-350
Wavelength (nm)	355nm	
Power	150mW	350mW
Repetition Rate <sup>1</sup> (MHz)	80MHz $\pm$ 1MHz	
Pulsewidth <sup>2</sup> (ps)	< 12ps	
Beam Spatial Profile	TEM <sub>00</sub> ( $M^2 < 1.3$ )	
Average Power Stability <sup>3</sup> (RMS)	< 2%	
Polarization Ratio	> 100:1 Horizontal	
Beam Circularity (%)	> 85%	
Beam Pointing Stability <sup>4</sup> ( $\mu$ rad/ $^{\circ}$ C)	< 20 $\mu$ rad/ $^{\circ}$ C	
Beam Diameter <sup>5</sup> (mm)	~1mm	

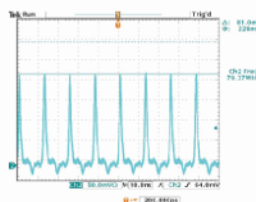
### General characteristics

AC Input	220 VAC $\pm$ 5% 50-60Hz
Power Consumption	< 1kW
Cooling Type	Closed-loop water cooling
Operating Conditions	Temperature 15-35 $^{\circ}$ C Humidity < 65%
Warm-Up Time (mins)	< 40mins

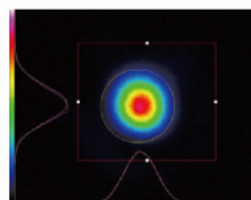
### NOTES

- Other repetition rates available, please contact Grace Laser for more information. All specifications listed at 355nm and 80MHz repetition rate unless otherwise noted.
- Interpolated from measurement of fundamental 1064nm laser pulse. A sech<sup>2</sup> (0.65 deconvolution factor) shape is used to determine 1064nm pulsewidth.
- Average in 8 hours with room temperature variation  $\delta T < 3^{\circ}$ C.
- Maximum deviation from beam mean centroid.
- Output of laser head at 355nm.

80MHz mode locked pulses



Near field beam profile



### China

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