

# 369nm narrow linewidth laser

PreciLasers' 369nm laser is obtained by a single pass of the 1108nm laser through frequency tripling. It has the Featuress of narrow linewidth and high frequency stability. It can be widely used in the fields of optical precision measurement, quantum precision measurement, such as Yb+ related experiments.

#### Features

- Narrow linewidth
- High frequency
- stability Linear
- polarization CW laser

### application

- Optical precision measurement
- Quantum precision measurement





Optical parameters		
Central wavelength	369nm	
Output power	> 20mW	> 40mW
Tuning range (temperature)	> 0.2nm	
Output Mode	Spatial collimation output, diameter ~0.7mm	
Linewidth <sup>(1)</sup> (100us integration time)	< 30kHz	
Polarization extinction ratio	> 20dB	
Power Stability (3 Hours RMS)	< 0.75%	
Beam quality	M <sup>2</sup> < 1.1	
PZT tuning range	> 9GHz	
PZT tuning bandwidth	> 5kHz	
Cooling method	Air Cooling	Water Cooling

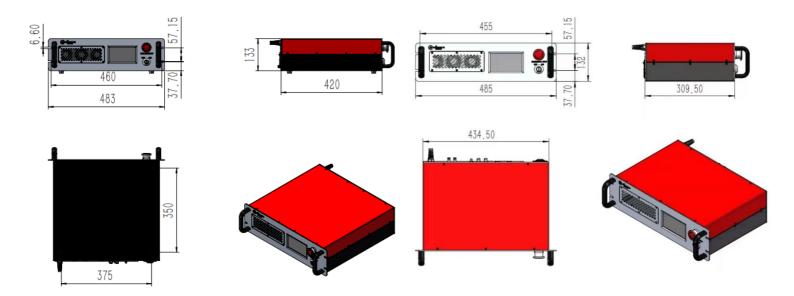
(1) Fiber-delay self-heterodyne beat frequency method measurement

Options		
AOM options	Adding AOM and VCO driver between seed and amplifier enables 500kHz tuning bandwidth and >±5MHz tuning range	
EOM-RF Option	Adding EOM between the seed and the amplifier to achieve sideband modulation	

Other parameters	
Working temperature	15-25°C
Supply electricity	100V-220V, AC, 50Hz

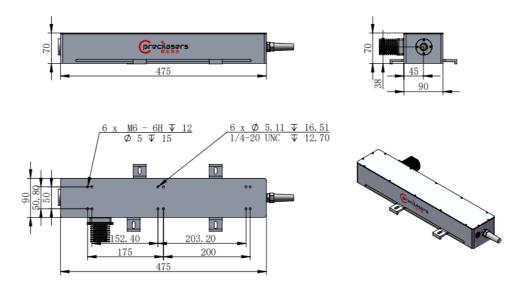


## Product Dimensions



Amplifier Chassis - Air Cooled

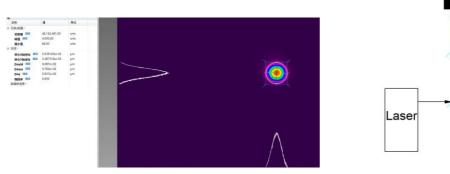
Seed Laser Dimensions - Air Cooled

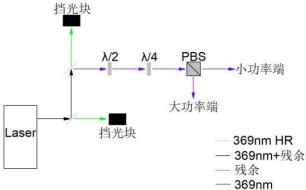


Frequency doubling head dimensions



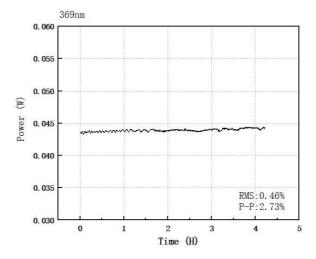
## Performance index test (typical value)





#### Light spot test chart

The polarization degree of 369nm laser is about 21dB



Power stability test chart, PP is about 2.73%, RMS is about 0.46%

