

193nm narrow linewidth laser

Based on single-frequency seed laser, fiber laser amplification and high-efficiency frequency conversion technology, Frequency Accurate Laser can provide a narrow-linewidth 193nm Continuous laser with high frequency stability, long life and excellent beam quality.

Features

- Narrow linewidth
- Excellent beam quality
- Never mode-hop
- Continuous laser

Applications

- Precision measurement



| Optical parameters | | |
|---|--|---------------|
| Part Number | FL-SF-193-XX ⁽¹⁾ -CW | |
| Central wavelength | 193.368nm | |
| Operation Mode | Continuous | |
| Output power | > 3mW | > 10mW |
| Linewidth ⁽²⁾ (100us integration time) | < 100kHz | |
| Power stability | RMS < 1%@2hrs | |
| Output mode | Single-mode polarization-maintaining fiber | |
| Polarization extinction ratio | > 20dB | |
| Coherence length | > 100m | |
| Spot diameter | 1.0mm±0.1mm | 1.1mm±0.1mm |
| Divergence angle | Full angle, < 0.15mrad | |
| Wavelength stability | < ±200fm@24h | |
| Pointing stability | < 13.5urad,RMS | |
| Beam quality | TEM ₀₀ , M ² < 1.5 | |
| Cooling method | Air cooling | Water cooling |

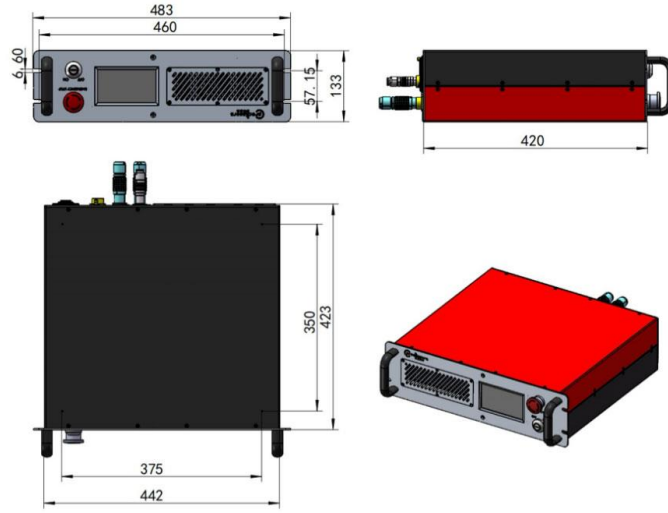
(1)XX laser power, in W, for example, Output power 3mW: FL-SF-193-0.003-CW.

(2)Fiber Delay Self-Heterodyne Beat Frequency Measurement.

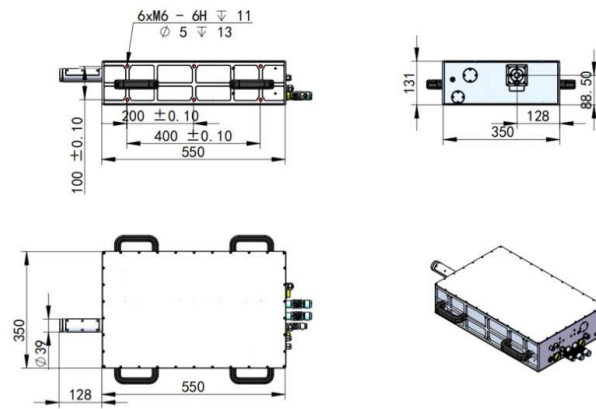
| Options | |
|--------------------------------|-------------------------------------|
| Frequency Stabilization Option | Frequency Stabilization < ±10fm@24h |
| Air Pump Options | Air pump provided |

| Other parameters | |
|---------------------|------------------------|
| Weight | < 60kg |
| Working temperature | 15-25°C |
| Power consumption | < 400W |
| Power supply | 100V-220V, AC, 50/60Hz |

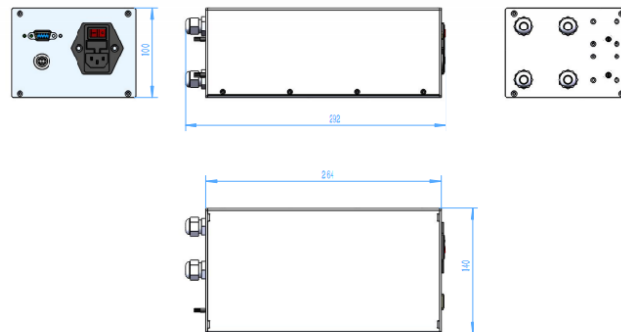
❖ Product Dimensions



Controller Size(3mW)

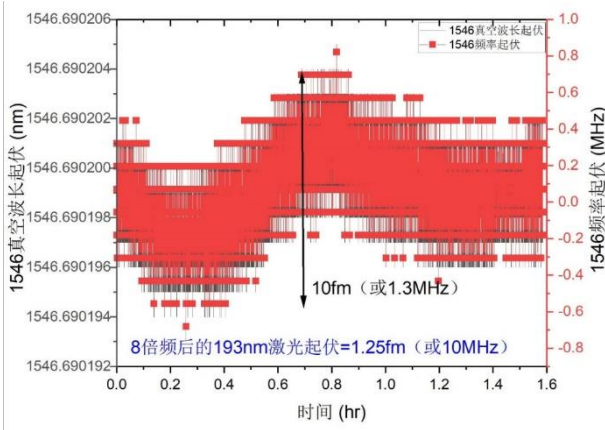


Laser head dimensions (3mW)

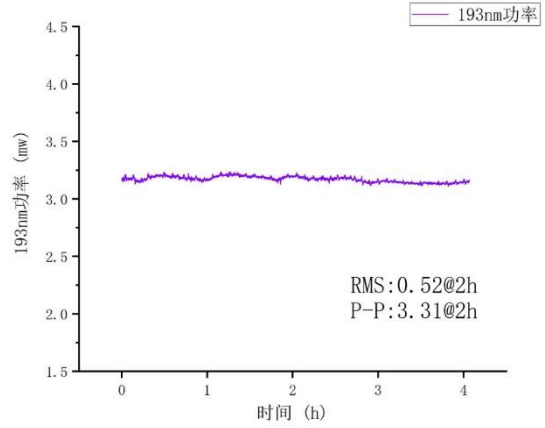


Air pump size (this module is Optional)

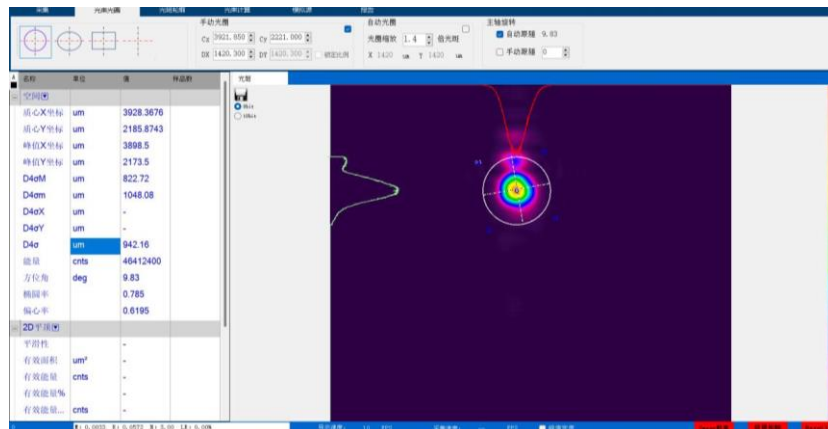
❖ Performance index test (typical value)



Wavelength stability test chart



Power stability test chart



Light spot test chart



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⚠ Laser Hazard

Visible or invisible laser radiation, avoid eye or skin exposure to direct, reflected or filtered radiation.

CLASS 4 Laser Products