

HIGH-POWER DIODE LASER SIDE PUMPED MODULES

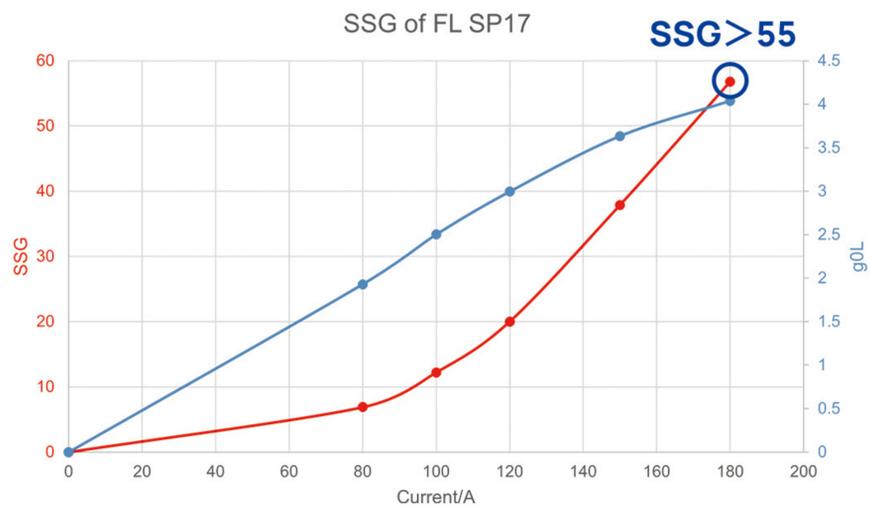
Diode pumped solid-state lasers (DPSSLs), enjoying the advantages of high power, high beam quality output, less thermal effect, high efficiency, and compact device structure, have gradually replaced the traditional lamp pumped lasers and gas lasers. As the core pumping source, the diode laser side pumped modules determine the performance and reliability of solid-state lasers.

Utilizing Focuslight's advanced high-power diode lasers as the core component, and employing unique optical design, water flow design and the ASE (Amplified Spontaneous Emission) effect control method, SP17 & SP18 achieve high-peak power, high gain, and high uniformity of fluorescence distribution. As the gain increases, the high-peak power pumping module will generate a serious ASE effect if no corresponding measures are taken, which results in gain saturation and in the end, prevents the module from a high SSG value. SP17 and SP18 side pumped modules take effective measures to inhibit the ASE effect.

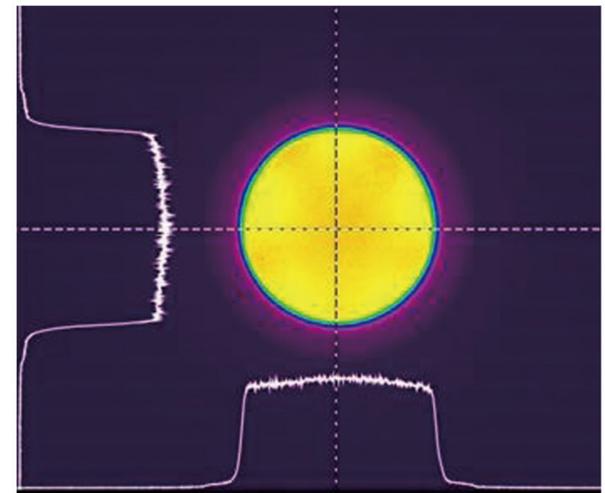
Product Features

Part No.	Pumping Peak Power (W)	Rod Diameter (mm)	Number of Bars	Small Signal Gain (SSG)	Work Mode
• SP17	30,000	10	150	>55	QCW
• SP18	5000	4	25	>30	QCW

Note: Products can be customized according to specific requirements.

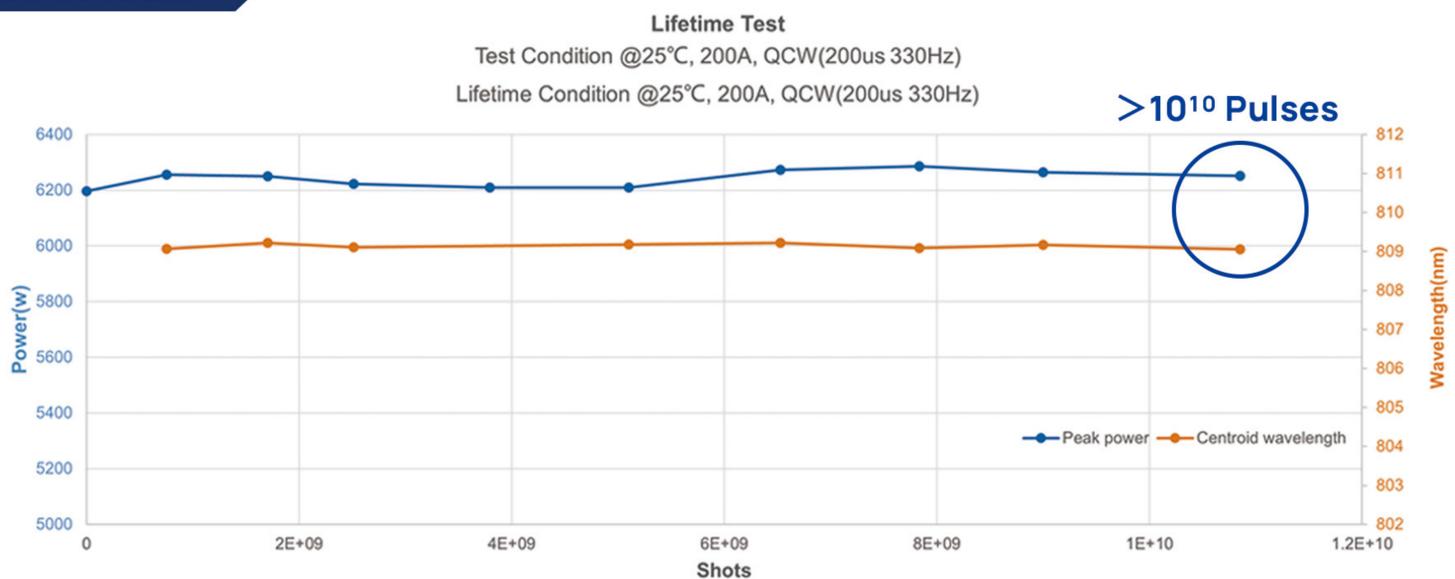


SSG Test Data



Fluorescence Imaging Profile

Lifetime Test Data



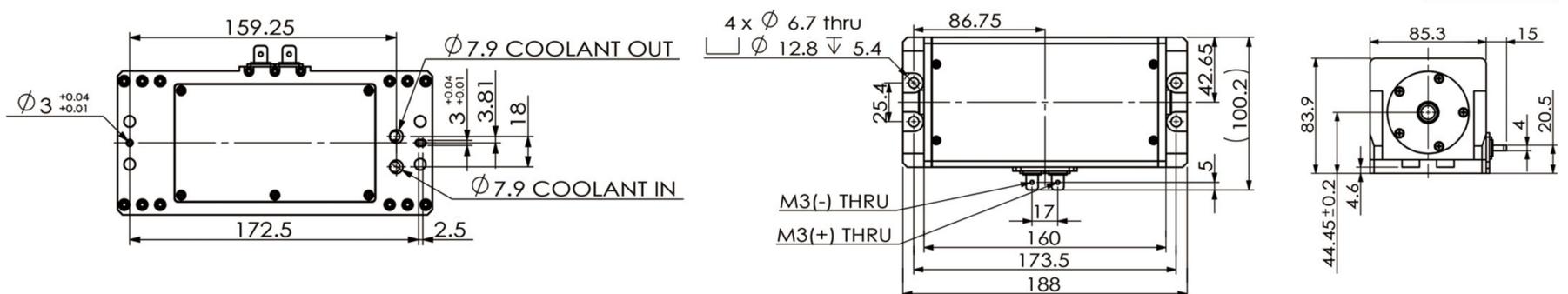
Lifetime Test

Test Condition @25°C, 200A, QCW(200us 330Hz)

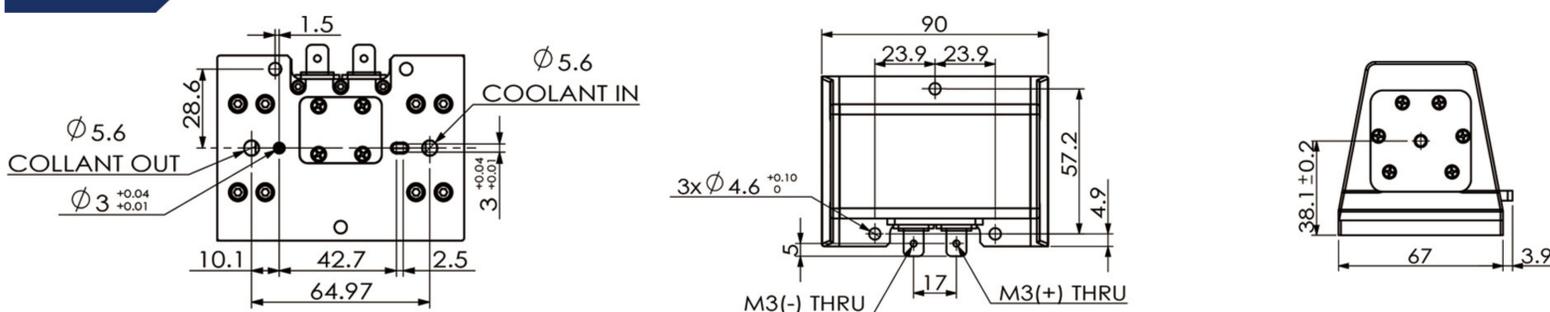
Lifetime Condition @25°C, 200A, QCW(200us 330Hz)

> 10¹⁰ Pulses

SP17



SP18



COMPANY INTRODUCTION

Founded in 2007 and headquartered in Xi'an, China, Focuslight Technologies is a fast-growing company that develops and manufactures high-power diode laser components and materials (photon generation), laser optics (photon control), photonic application modules, assemblies, and sub-systems (photonics application solutions) with a focus on automotive, pan-semiconductor, and medical & health application solutions. In 2017, Focuslight acquired LIMO, one of the leading manufacturers of micro-optics and beam shaping solutions, and a pioneer in groundbreaking photonics production technologies. After the successful IPO at the Shanghai Stock Exchange Star Market (Ticker Symbol: 688167) in December 2021, Focuslight has unified its brand globally in January 2022. Focuslight has over 400 patents worldwide and is ISO 14001, ISO 45001, ISO 9001, and IATF 16949 certified.