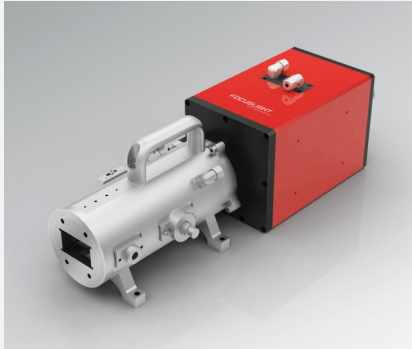


Diode Laser System for Laser Wafer Annealing

DLight[®]S Series



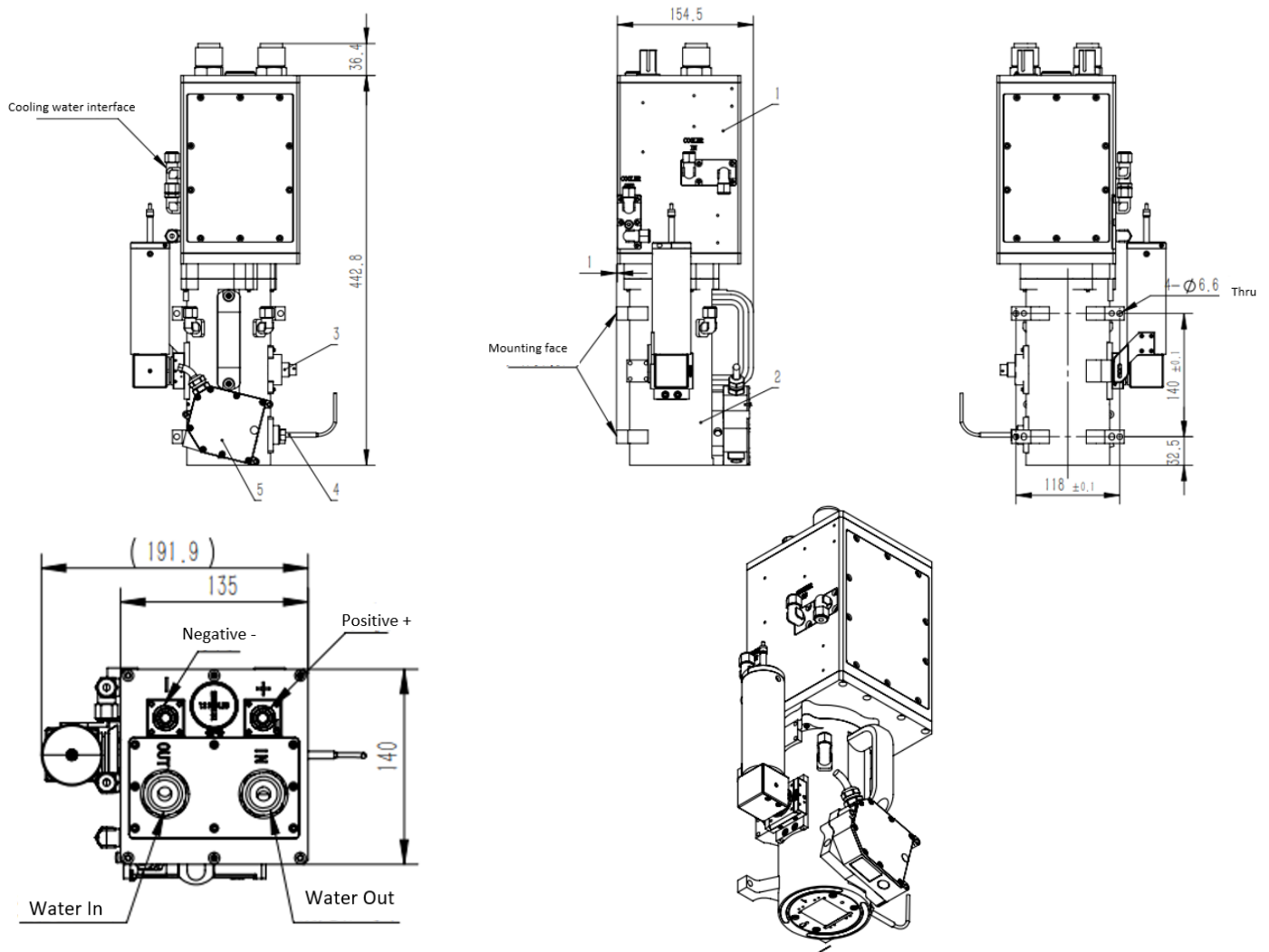
Features

- Narrow beam width
- High power density
- Modular design, easy maintenance
- High product consistency
- Multiple additional functions

Applications

- Dynamic surface annealing
- Laser spike annealing
- Film annealing
- Material surface treatment

Product Dimensions (mm)



Remark: The structure drawing is only for reference. For any other special requirement, please feel free to contact us.

Product Specifications

Product Code (Typical Customization)
Part No. ¹ FL - DLight - S1500A

Optical Parameters ²	Unit	
Operation Mode	-	CW
Max Output Power ³	W	1500
Standard Output Power ⁴	W	1050
Power Stability	%	≤ ± 2
Wavelength	nm	808
Wavelength Tolerance	nm	± 5
Beam Length: Top-hat Area	mm	11.5 ± 0.5
Beam Length: Beam Profile	-	Top hat
Beam Length: Uniformity ⁵	%	≥ 95
Beam width: FWHM	μm	70 ± 5
Beam width: Beam Profile	-	Gaussian
Beam width: Stability	μm	≤ ± 1
Working Distance	mm	45-50
Depth of Focus ⁶	μm	± 80

Working Parameters		
Operating Current	A	≤ 100
Operating Voltage	V	≤ 40
Impact resistance	g	≥ 1
Laser system motion Velocity: Working surface	mm/s	≤ 500
Laser system motion Velocity: Focus Axis	mm/s	≤ 10

Ambient Parameters ⁷		
Operating Temperature	°C	25
Storage Temperature	°C	5 ~ 45
Cooling Method	-	DI Water cooling
DI Water Quality	μS/cm	2 ~ 5

Product Configuration ⁸		
Dimensions (height × width × depth)	mm	480 x 155 x 192
System Configuration		Power Supply/Controller/Cooling System
Optional Configuration		Pyrometer / Beam quality analysis system / Power meter

¹ Part No. = Brand Code - Series - Power - Configuration.

² Data at operating temperature, unless otherwise stated.

³ Reduced lifetimes if used above Max output power.

⁴ All parameters are tested under the standard output power.

⁵ The uniformity judgment standard complies with ISO 13694-2018.

⁶ Depth of Focus for 5% change of beam length or width.

⁷ A non-condensing environment is required for storage and operation below ambient dew point.

⁸ Product configuration can be customized.

