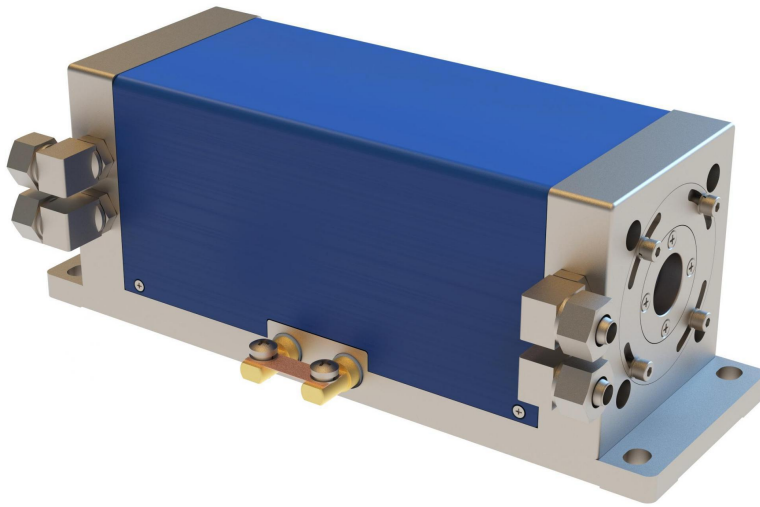



# QCW Diode Pumped Nd: YAG Laser

Lumispot Tech OEM DPSS Laser



  
High-power  
pumping capability

  
High Gain  
Uniformity

  
Macrochannel  
water cooling

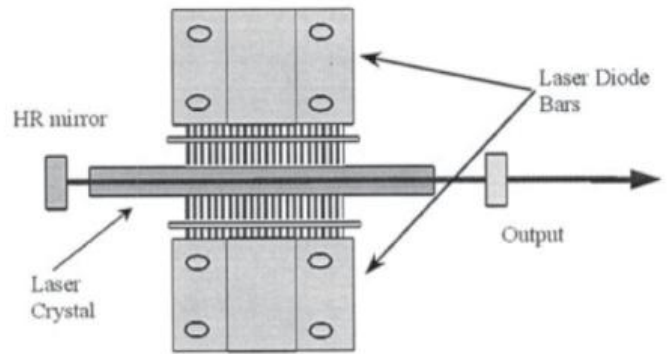
  
Low Maintenance  
Cost

  
Compact Design

  
Long Lifespan


**Side pumping**, also known as transverse pumping, refers to the process where the pumping light from the side of the gain medium is directed into the gain medium, and the laser mode oscillates along the length direction of the gain medium.

**Characteristic of side pumping:** The direction of the pumping light is perpendicular to the direction of laser output.




# CW Diode Pumped Nd: YAG Laser


Lumispot Tech OEM DPSS Laser

  
High-power  
pumping capability

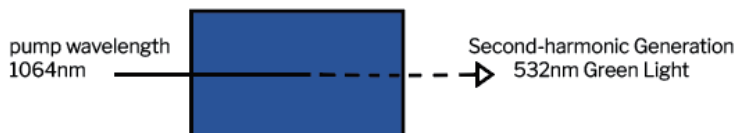
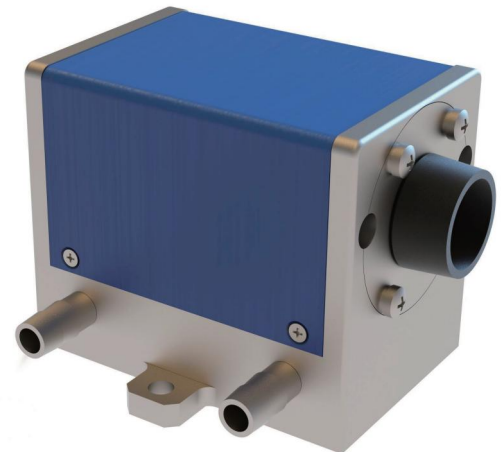
  
High Gain  
Uniformity

  
Macrochannel  
water cooling

  
Low Maintenance  
Cost

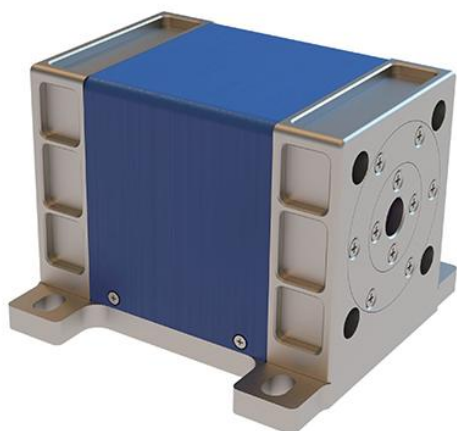
  
Compact Design

  
Long Lifespan



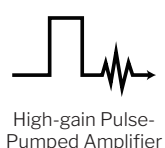
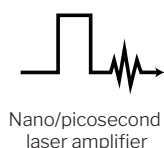
# QCW Diode Pumped Nd: YAG Laser

## Technical Datasheet



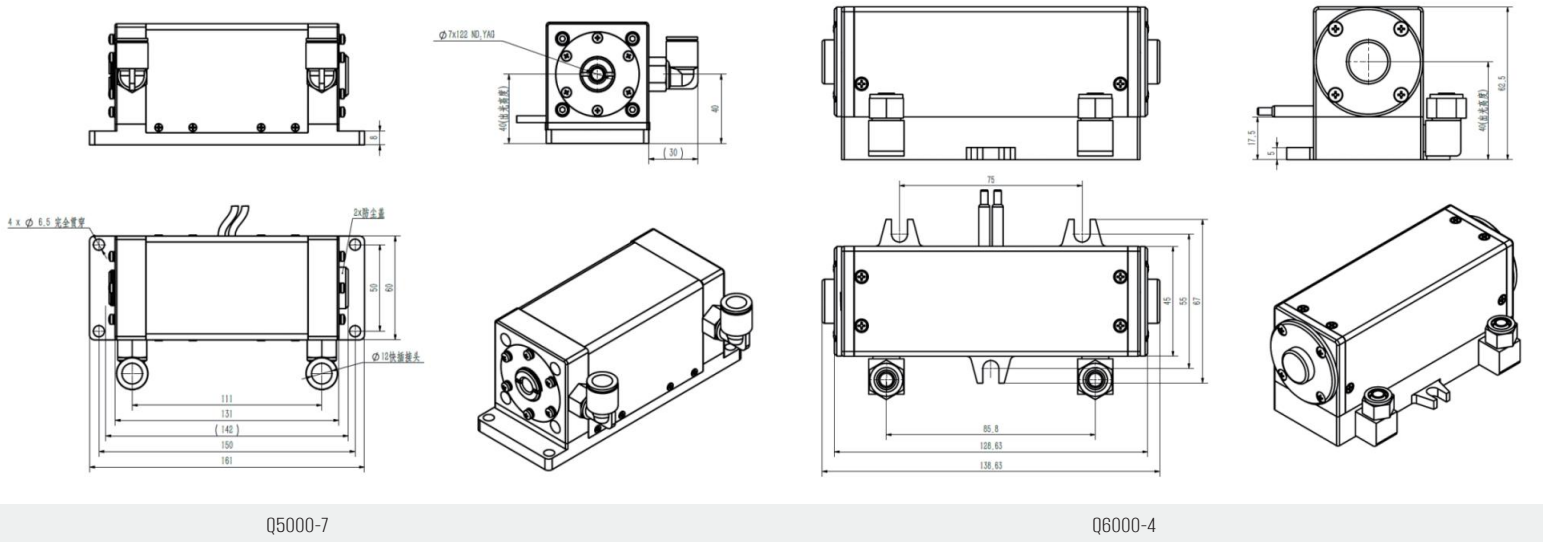
	Q3000-3	Q6000-8	Q16000-10	Q10000-15	Remarks
Pump Wavelength /nm	808±3	808±3	808±3	808±3	@25°C water temp.
Pump Spectral Width /nm	4	4	4	4	
Rated Pump Power /W	3000	6000	16000	10000	Customizable Power Options
Pulse Width /μs	300	300	300	250	
Repetition Frequency /Hz	100	100	100	500	
Threshold Current /A	17	17	17	10	
Operating Current /A	100	100	100	50	
Operating Voltage /V	60	120	320	400	
ND:YAG Doping	0.6at.%	0.6at.%	0.6at.%	0.6at.%	Customizable Doping and Concentration
Excitation Wavelength /nm	1064	1064	1064	1064	
Crystal Size /mm	∅3×95	∅8×85	∅10×135	∅15×167	Low Power Mode Enabled
Recommended Water Cooling Temperature /°C	25	25	25	25	
Recommended Water Pressure /MPa	0.3-0.5	0.3-0.5	0.3-0.5	0.3-0.5	
Recommended Water Flow Rate / L/min	>12	>12	>12	>16	

\*Parameters can be customized as demand.



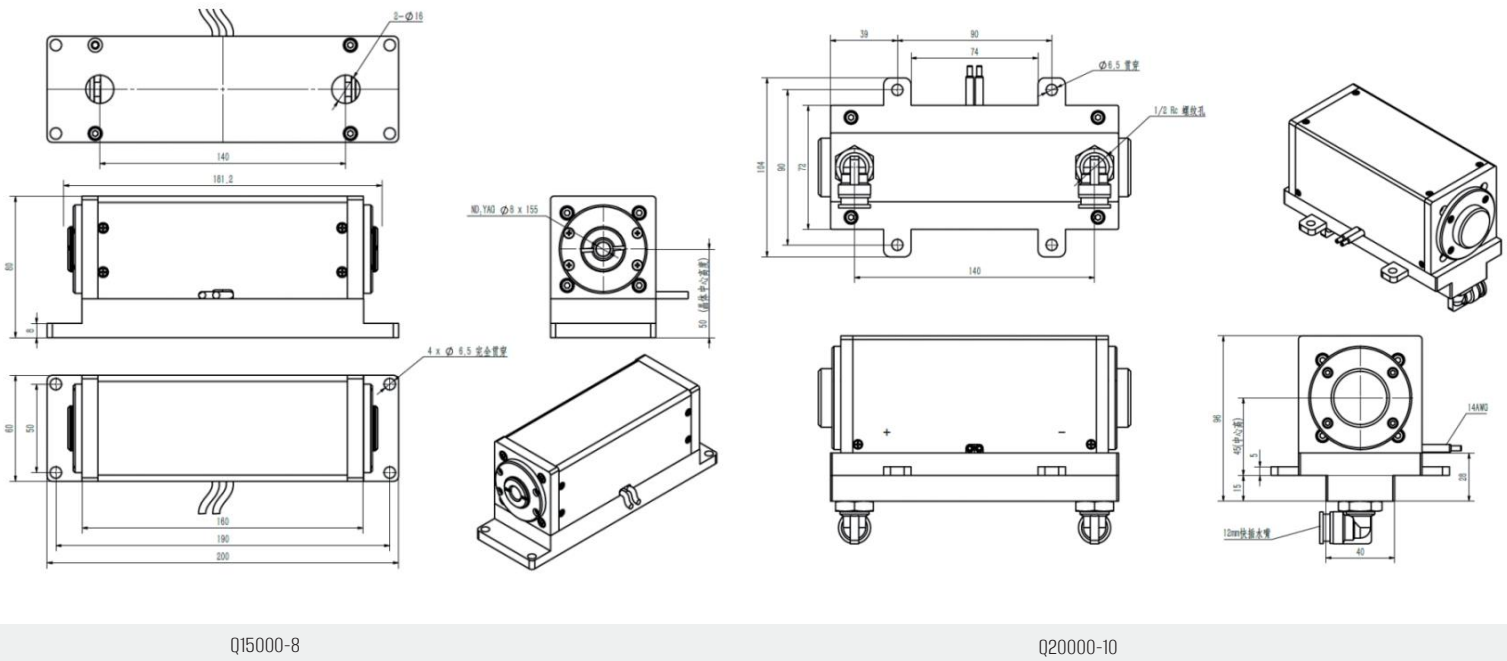
# QCW Diode Pumped Nd: YAG Laser

## Dimensional Graph



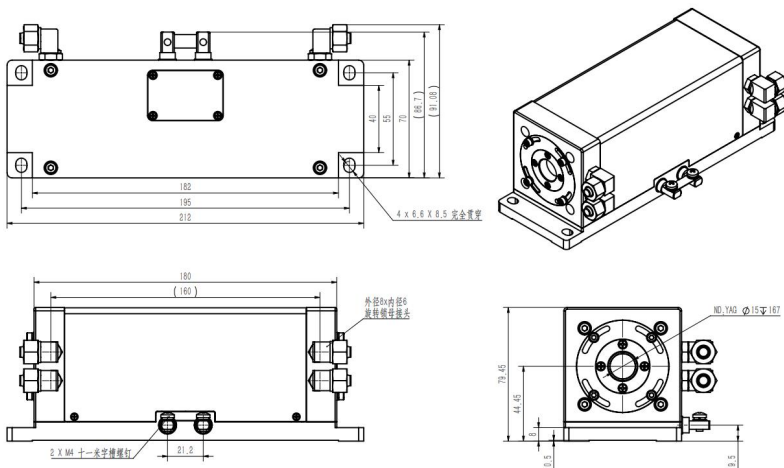
Q5000-7

Q6000-4



Q15000-8

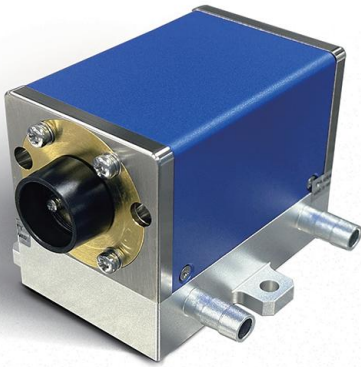
Q20000-10



Q10000-15

# CW Diode Pumped Nd: YAG Laser

Lumispot Tech OEM DPSS Laser



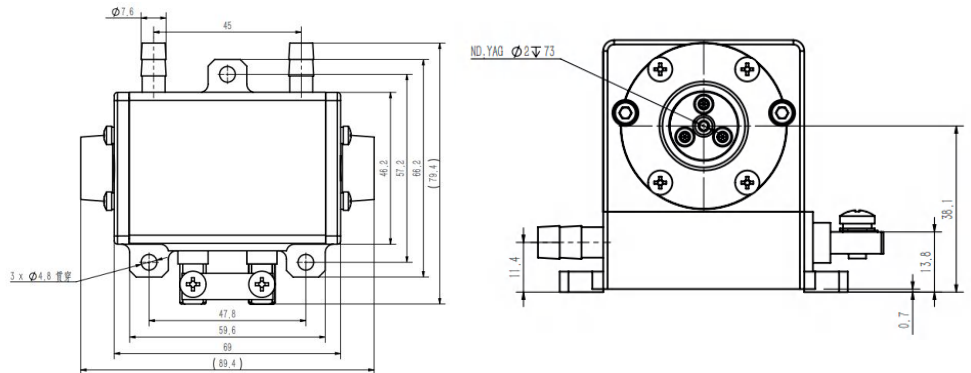
C240-3    C270-3    C300-2    C300-3    C600-4    C1500-5    Remarks

Pump Wavelength	808±3nm						@25°C water temp.
Pump Spectral Width	4nm						
Wavelength/Temp. Coefficient	0.28nm/°C						Customizable Power Options
Rated Pump Power	270W	270W	300W	300W	1000W	1500W	
Threshold Current	8A	8A	15A	8A	8A	8A	
Operating Current	20A	20A	25A	25A	30A	30A	
Operating Voltage	24V	28V	24V	24V	40V	100V	
Nd:YAG Doping	0.6at.%						
Excitation Wavelength	1064nm						Customizable Doping and Concentration
Output Power	75W(1)	75W(1)	50W(1)	120W(2)	230W(2)	500W(2)	
Crystal Size	ø3×67mm	ø3×78mm	ø2×73mm	ø3×67mm	ø4×95mm	ø5×167mm	Other size is customizable
Recommended Water Cooling Temp.	25°C						
Recommended Water Pressure	0.3-0.5MPa						
Recommended Water Flow	>4L/min	>4L/min	>4L/min	>12L/min	>12L/min	>16L/min	
Module Weight	1kg	1kg	1.5kg	1.5kg	3kg	4.5kg	

(1) The output power test condition is: 900mm cavity length, T=20%, parallel plane mirrors.

(2) The output power test condition is: 300mm cavity length, T=20%, parallel plane mirrors.

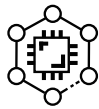
(\*) For more information on pump power, operating current, gain medium specifications, and doping conditions, please contact Lumispot Optoelectronics Group.



Nano/picosecond  
laser amplifier



High-gain Pulse-  
Pumped Amplifier



Micro-nano  
Fabrication



Laser Cutting



Environment



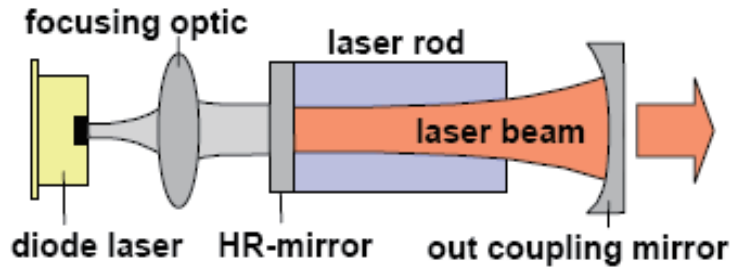
Meteorology



Medical

# QCW Diode Pumped Nd: YAG Laser

Structure & Primary Production Procedures



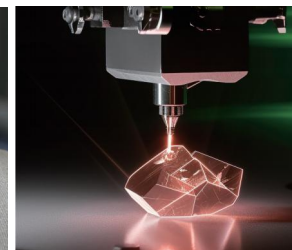
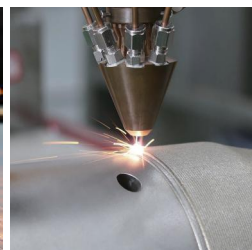
## Primary Production Procedures

Undergoing rigorous pre-shipment quality testing



## OEM Service

Customization Service available to support all kinds of needs



Laser cleaning, laser cladding, laser cutting, and gemstone cutting cases.

# Company Profile

About Lumispot



We're  
**Lumispot Tech**

**¥ 78**million  
Register Capital

**6+**  
Ph.D

**80%**  
Proportion of Talent

**150+**  
Patents



Lumispot Technology Group was established in 2010, located in Wuxi with registered capital of CNY 78.55 million, and production area of about 25,000 square meters and more than 500 employees. Through more than 14 years of efforts and development, Lumispot has become a leader in special laser information technology domain with a strong technical foundation.

Our expertise focusses on laser technology research & development, offering a wide range of products including laser diode, erbium laser, fiber lasers, solid-state lasers, and its system, such as laser rangefinder modules, LiDAR lasers, structured lasers, illumination systems, FOG components, dazzlers, etc. which are widely applied for defense & security, LiDAR system, remote sensing, inertial navigation, technical research, etc.

Our company is rewarded as National High-tech Enterprise and National Innovation enterprise, and more than 150 patent have been obtained.

## Contact

Email: [sales@lumispot.cn](mailto:sales@lumispot.cn)  
Website: [www.lumispot-tech.com](http://www.lumispot-tech.com)

- 2010 ●
- 2011 ●
- 2012 ●
- 2013 ●
- 2014 ●
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- 2017 ●
- 2018 ●
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- 2020 ●
- 2021 ●
- 2022 ●
- 2023 ●
- 2024 ●



**Illuminate Future  
From Laser**

We aim to become the global leader  
in laser special information domain.

