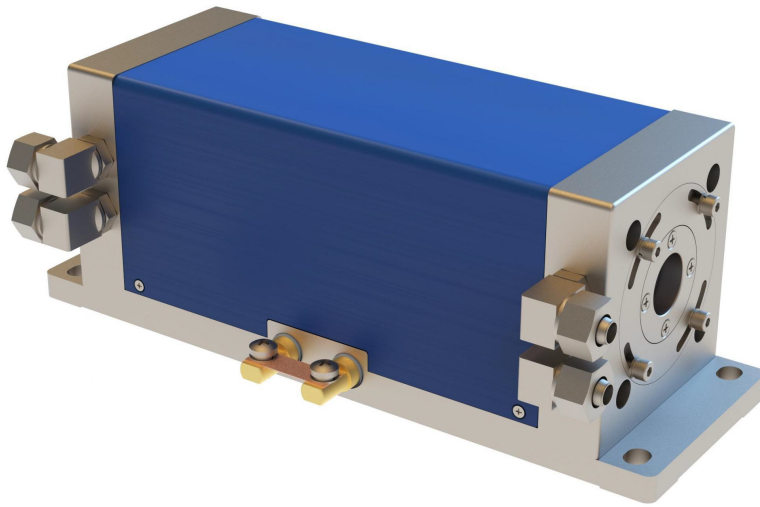



QCW Diode Pumped Nd: YAG Laser

www.lumispot-tech.com

Lumispot Tech OEM DPSS Laser




High-power
pumping capability


High Gain
Uniformity


Macrochannel
water cooling

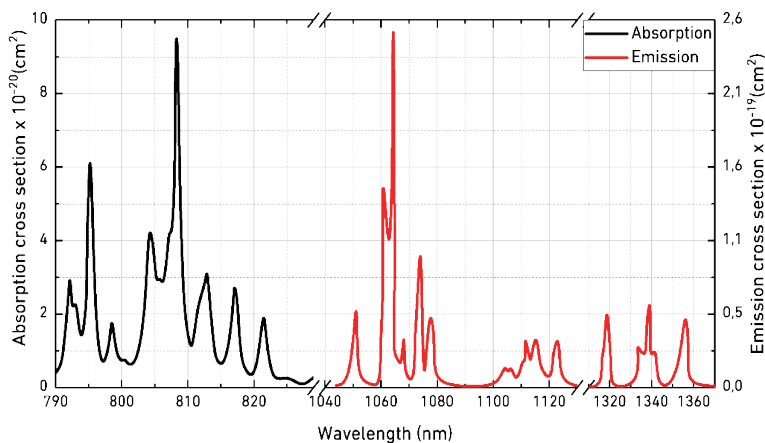
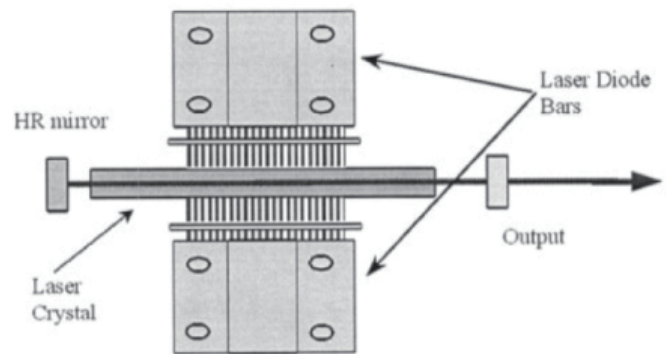

Low Maintenance
Cost


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.

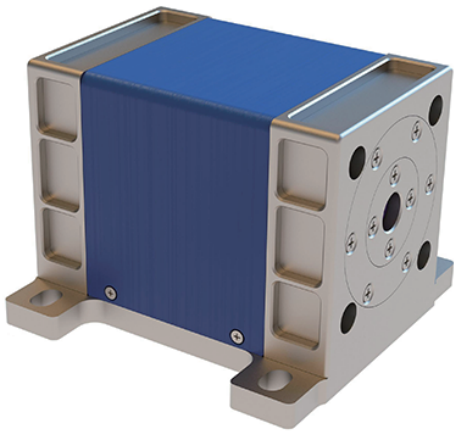


The DPSSL modules use Nd:YAG crystals as the laser medium. These crystals have the characteristic of absorbing light at the 808nm wavelength and then undergoing a four-level transition to emit a laser line at 1064nm. In conventional continuous-wave side-pumped solid-state lasers, the doping concentration of the Nd:YAG crystal is typically between 0.6atm% and 1.1atm%.

Our company's DPSS Laser modules often use crystals with a doping concentration of 0.6atm%. The standard crystal lengths range from 30 to 200mm, and the crystal diameters vary from Ø2mm to Ø15mm.

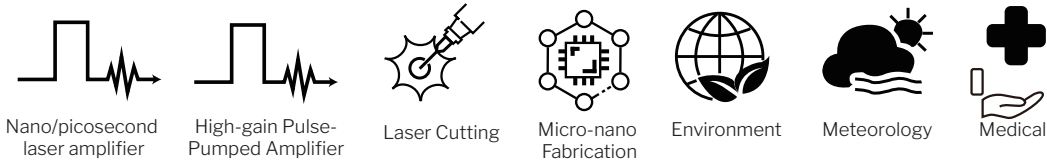
QCW Diode Pumped Nd: YAG Laser

Technical Datasheet



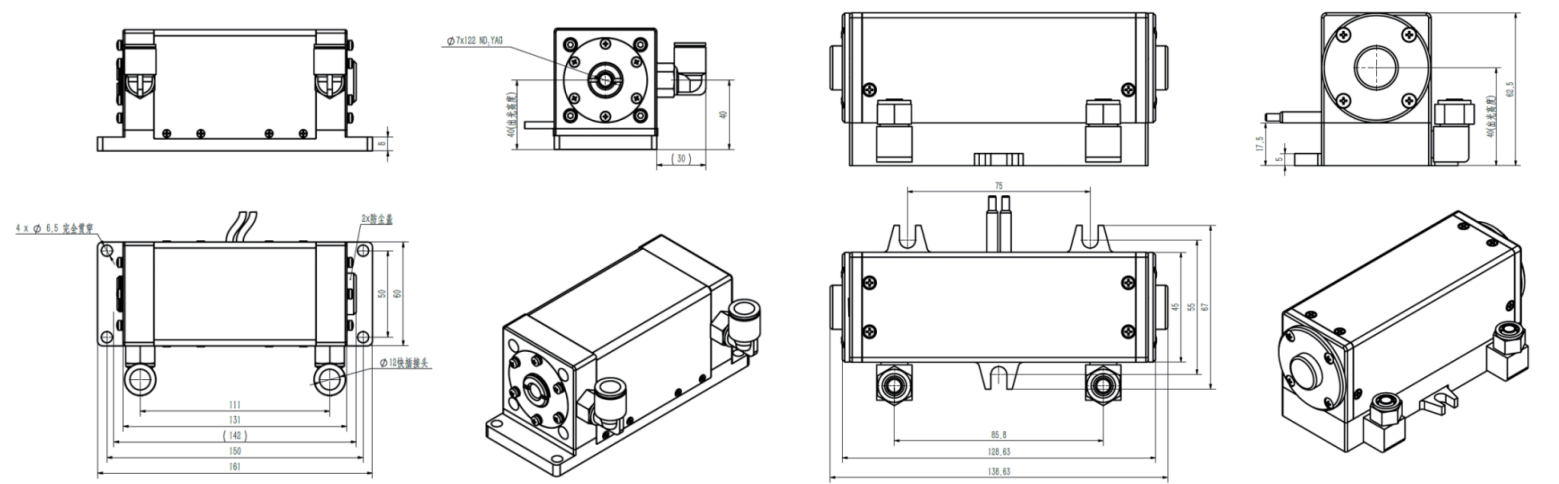
	Q3000-3	Q6000-8	Q16000-10	Q10000-15	Remarks
Pump Wavelength /nm	808±3	808±3	808±3	808±3	@25°C water temp.
Pump Spectral Width /nm	4	4	4	4	
Rated Pump Power /W	3000	6000	16000	10000	Customizable Power Options
Pulse Width /μs	300	300	300	250	
Repetition Frequency /Hz	100	100	100	500	
Threshold Current /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	ø3×95	ø8×85	ø10×135	ø15×167	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.



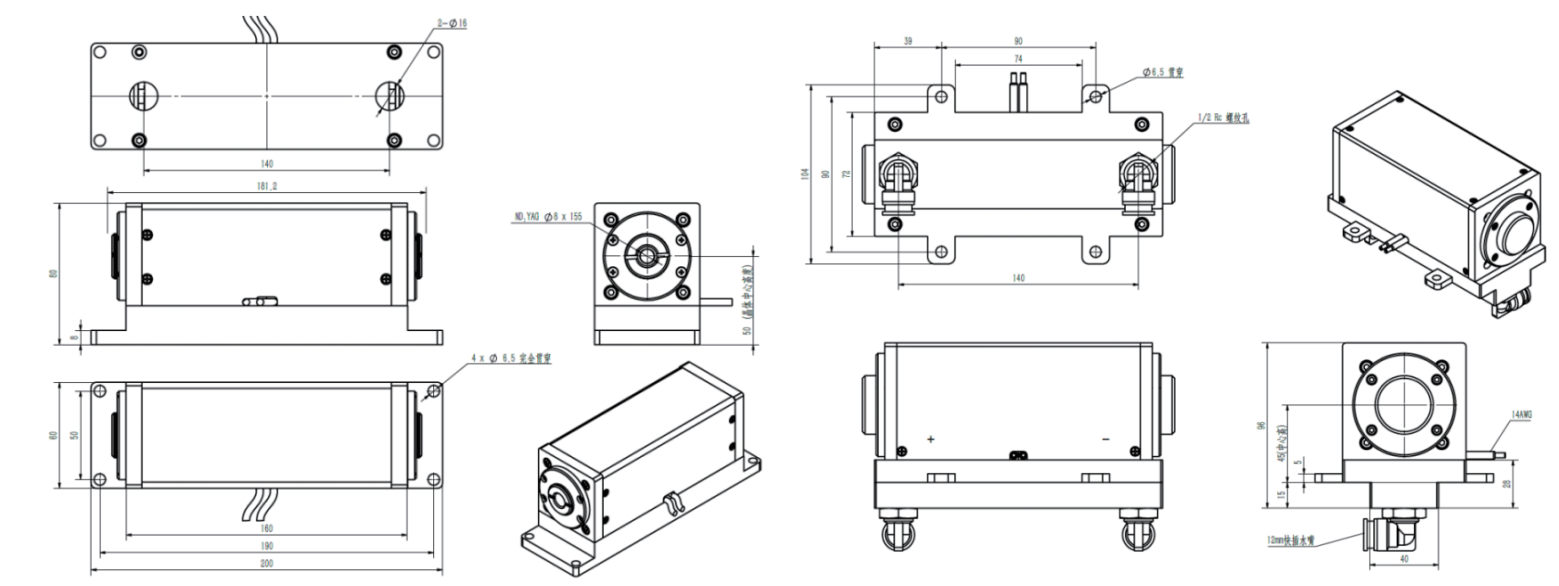
QCW Diode Pumped Nd: YAG Laser

Dimensional Graph



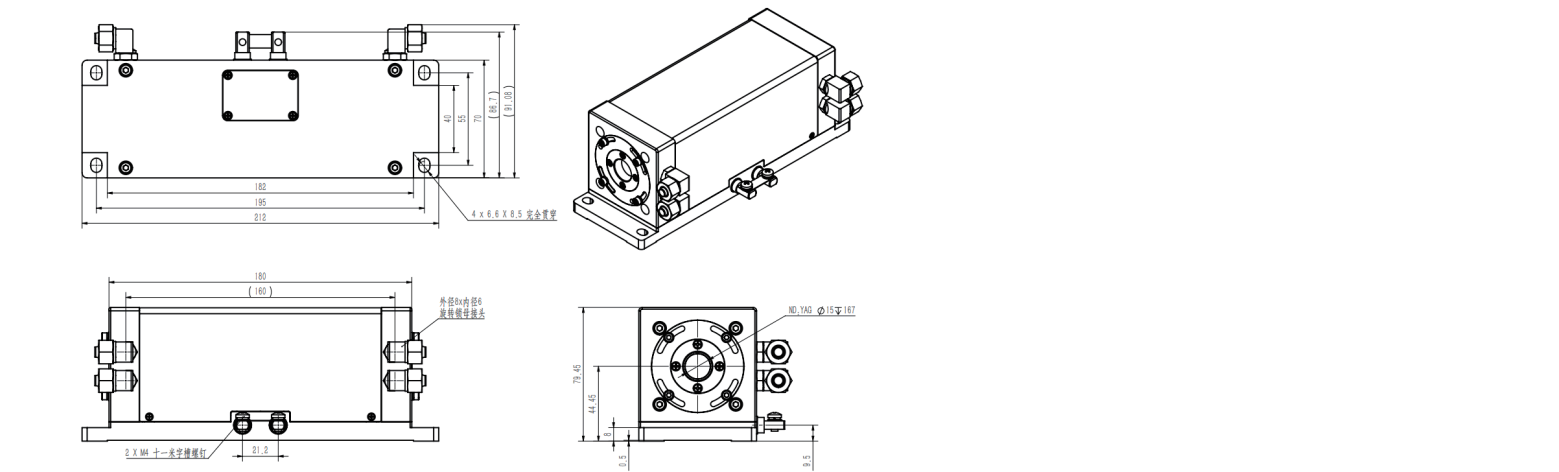
Q5000-7

Q6000-4



Q15000-8

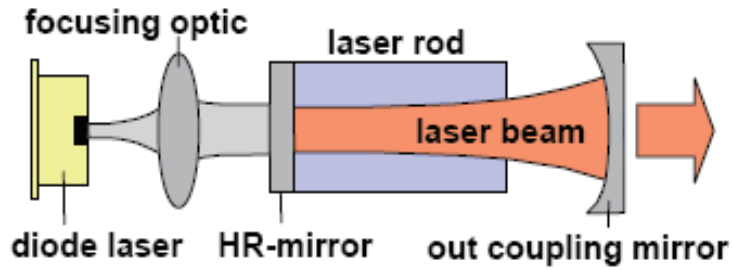
Q20000-10



Q10000-15

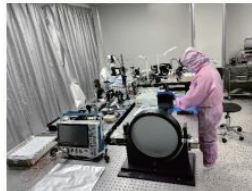
QCW Diode Pumped Nd: YAG Laser

Structure & Primary Production Procedures



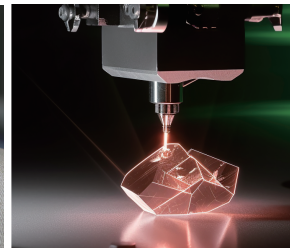
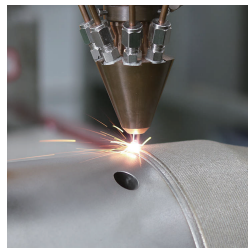
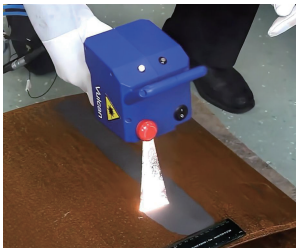
Primary Production Procedures

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

¥ 78million
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

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Website: www.lumispot-tech.com

- 2010 ●
- 2011 ●
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- 2024 ●



**Illuminate Future
From Laser**

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

