CW Series
Diode Side-Pumped Gain Module

The Continuous Wave (CW) Diode Side-Pumped Gain Module is a core component of solid-state laser that uses semiconductor diodes instead of traditional lamps for pumping. It offers high efficiency, long lifetime, excellent beam quality, and a compact design. It is well-suited for applications in scientific research, space communications, optical processing, and machining of highly reflective materials like gems and diamonds.



C1500-5 Nd_YAG

Technical Parameters

Key Features

Diamond Cutting /Frequency-Doubled Green Laser / Oscillator Stage | Laser Cleaning / Amplifier Stage | Medical

Item	Unit	C270-3	C300-2	C300-3	C600-4	C1500-5	C480-4	Remarks
Pump Wavelength	nm	808±3					806±2	@25°C Water Temp.
Pump Spectral Width	nm	4					3	
Wavelength/Temperature Coefficient	nm/°C	0.28						
Pump Rated Power	W	270	300	300	600	1500	400	Customizable
Threshold Current	A	8	15	8	8	8	8	
Operating Current	A	20	25	25	30	30	20	
Operating Voltage	V	28	24	24	40	100	48	
Doping Concentration	at.%	0.6					0.55	Customizable
Crystal Specification	-	Nd_YAG					Nd_YLF	
Emission Wavelength	nm	1064					1047/1053	
Output Power	W	75(1)	55(1)	130(2)	230(2)	600(2)	-	
Crystal Dimensions	mm	Ø3x78	Ø2x73	Ø3x67	Ø4x95	Ø5x167	Ø4x125	Customizable
Recommended Water Temperature	°C	25±3						
Recommended Water Pressure	Mpa	0.25~0.4						
Recommended Water Flow Rate	L/min	>8			>10	>14	>10	
Module Weight	kg	1			3	4.5	2	

Note: (1) The output power test conditions are as follows: cavity length of 900mm, T=20%, and parallel plane mirrors.
(2) The output power test conditions are as follows: 300mm cavity length, T=20%, and parallel plane mirrors.
(3) For more details on pump power, operating current, and other conditions, please contact us.
(4) For more gain medium specifications (e.g., Nd:YAG/Nd:YLF/Nd:YVO4/Er:YAG) and doping conditions (0.4at%~1.0at%), please contact us.

Core Technology

Low Thermal Lens Effect

High-Power Pumping Capacity

Macrochannel Water-Cooling

Low-Maintenance Cost