

# 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

C270-3      C300-2      C300-3      C600-4      C1500-5      C480-4

Item	Unit	Typical Value						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		
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