Conductive Cooling Series Conductively Cooled Diode Side-Pumped Gain Module

The Conductively Cooled Diode Side-Pumped Gain Module is a core component of solid-state laser. Depending on application needs and power levels, it supports various cooling methods—including TEC temperature control, water cooling, forced air cooling, conduction cooling, and no temperature control—making it suitable for fields like space communications, micro-nano processing, atmospheric research, environmental science, medical devices, and optical image processing, with excellent adaptability and application prospects.



TQ6000-ms6

Technical Parameters

TQ2700-ms5 TQ3600-ms5 TQ4500-ms6 TQ6000-ms6 TQ4000-ms6 TQ3200-id5 TQ3600-id5 TQ12000-id8 TQ15600-id7 TQ1000-ms3

Item l											
T.C.III	Unit	Typical Value									
Pump Wavelength(1)	nm	792~812									
Pump Spectral Width	nm	4nm									
Wavelength/Temperature Coefficient nr	ım/°C	0.28nm/°C									
Pump Rated Power(1)	W	2700	3600	4500	6000	4000	3200	3600	12000	15600	1000
Threshold Current	Α	17	17	17	17	21	17	17	17	21	21
Operating Current	Α	100	100	100	100	220	100	100	100	160	100
Operating Voltage	V	54	72	100	120	36	32+32	40+40	120+120	86+86	22
Pulse Width	μs	250	250	250	1000	250	250	250	250	250	150
Repetition Rate	Hz	20	20	20	1	25	30	25	25	25	5
Duty Cycle	%	0.5	0.5	0.5	1	0.625	0.75	0.625	0.625	0.625	0.075
Doping Concentration(2)	at.%	0.6/0.8/1.0									0.6
Crystal Specification(2)	-	Nd_YAG									Nd_YVO4
Emission Wavelength	nm	1064									
Crystal Dimensions	mm	Ø5x50	Ø5x60	Ø6x62	Ø6x125	Ø6x60	Ø5x20	Ø5x28	Ø8x45	Ø7x40	Ø3x25
Number of crystals	pcs	1 2							1		
Crystal Fixation Method (3)	-	Mechanical Fixation Indium Enco						apsulation		Mechanical Fixation	
Cooling method (4)	-	Conduction Cooling									
Recommended Water Temperature(5)	°C	25±5									
Recommended Water Pressure(5)	°C	-45~60									

Note: (*) Each module is designed to have the capability of uniform pumping.

- (1) For more information on pump power, operating current, wavelength, and other conditions, please contact us.
- (2) For more specifications of gain media (such as Nd_YAG/Nd_YLF/Nd_YVO4/Er_YAG) and doping conditions (0.4at%~1.0at%), please contact us.
- (3) The products with mechanically fixed crystals adopt a stress free solution.
- (4) Cooling methods such as TEC/water-cooled temperature control/forced air cooling/no temperature control, etc.
- (5)The maximum customizable temperature range is: operating temperature -50°C to 70°C, storage temperature -60°C to 85°C.