3000W Water Cooled QCW Diode Side-pumped Module

Using RealLight's WA series water cooled diode laser arrays as the core components, the 3000W water cooled QCW diode side-pumped module enables high peak power pumping and high-gain output, while effectively suppressing the ASE effect. With excellent beam quality, compact structure, and low thermal effects, this product is widely used in solid-state laser manufacturing.

Key Features

- High conversion efficiency
- Uniform pump absorption
- Exceptional stability and reliability

Applications

Laser manufacturing

Biomedicine

Material processing

Scientific research

Technical Specifications

Optical Parameters		
Pump Wavelength (nm)	808±3	
Spectral Width (nm)	≤5	
Pump Peak Power (W)	2400	3000
Crystal Material	Nd:YAG	
Crystal Diameter (mm)	Φ3×75	Φ4×75
Number of Bars	12	12
Electrical Parameters		
Operating Current (A)	<200	<250
Operating Volatge (V)	<24	<24
Working Mode	QCW	
Duty Cycle (%)	≤3	
Pulse Width (μs)	≤300	
Repetition Rate (Hz)	≤100	
Other Parameters		
Water Flow Rate (L/min)	8~10	
Water Pressure (MPa)	<0.5	
Coolant	Distilled Water	
Operating Temperature (˚C)	10~35	
Storage Temperature (˚C)	-10~50	

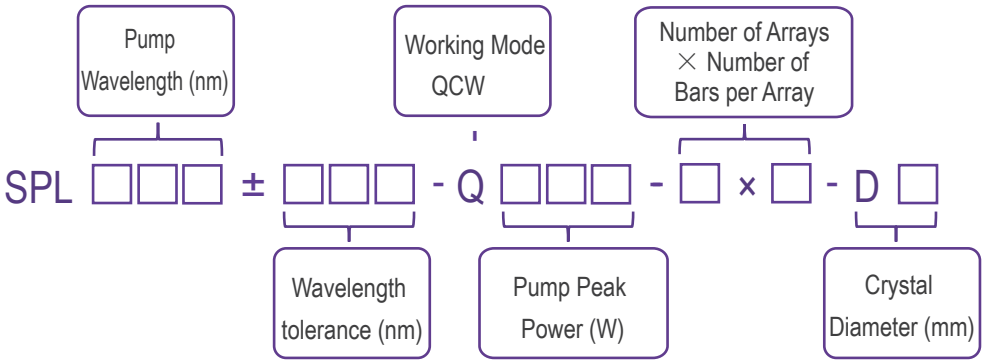
Notes:

1. Custom wedge angles for the crystal rod are available upon request.
2. All data in the table above are typical values measured at room temperature of 25°C. Final data is subject to the test report.

Order Information

Pump Wavelength (nm)	Part Number	Pump Peak Power (W)	Crystal Diameter (mm)	Number of Bars	Working Mode
808	SPL808±3-Q2400-3x4-D3	2400	3	12	QCW
	SPL808±3-Q3000-3x4-D4	3000	4	12	QCW

Part Numbering Schema



Mechanical Drawings (in mm)