



1000W BLUE LASER

The RPK Series of fiber-coupled diode lasers utilize single emitter laser diodes with either a single laser diode or multiple laser diodes to increase the output power. Single emitter devices require a lower current than laser diode bar products, making them a cost-effective, reliable, time-tested, and easier to use solution for your application. These high-power and high brightness diode lasers are available in wavelengths from 405nm thru 1550nm with up to 300W output powers. They are available in various package types with options including aiming beam, photo-detector, TEC, fiber detector, and thermistor.

Features

Low cost and maintenance-free	There are two modes of continuous and modulated pulse to optimize processing quality
Excellent power stability	Good beam quality, suitable for precision processing
Excellent system stability	High electro-optical conversion efficiency
Simple control interface	Maximum modulation frequency up to 5kHz

Applications

Additive manufacturing
Surface heat treatment
Welding
Lithium battery processing

Product technical indicators

Optical characteristics

Specifications	RBDL-CW500-E300	RBDL-CW1000-E400
Optical Power	500W	1000W
Wavelength	450±15 nm	
Output fiber core diameter	330µm /400µm	400µm/600µm
Cable Length	10m or Customized	
Beam Delivery	QBH or Customized	
Guide Beam	Red	
Operation Mode	Continuous or Modulated	
Polarization	Random	
Power Stability(25°C)	<3%(2h)	
Power Adjustment Scope	10%-100%	
Max. Modulation Frequency	5kHz	

Mechanical size and weight

Weight	<80kg
Outline Feature	420*590*900mm

Electrical characteristics

Voltage	three Phase, 380±20V, AC, PE, 50/60Hz	
Power Consumption	2.5 kW	5.0kW
Control Interface	RS232	

Water cooling parameters

Mini. Water Cooling Capacity	2.0kW	4.0kW
Temperature Settings	25°C(Laser Module) , 30°C(QBH)	
Cooling Tubes Size(Inner)	19mm	
Cooling Water Flux	>15L/min	>25L/min
QBH Cooling Water Flux	2.0L/min	

Note: The return light will affect the performance and life of the direct semiconductor laser, and it needs to be used under the condition that the output laser is deviated from the vertical direction of the worktable by 8°-10°.

External dimensions

