



FEATURES

- > Low cost
- > Maintenance free operation
- > Excellent power stability
- > Convenient control interface

- > Modulation frequency up to 5kHz
- **➢** High wall-plug efficiency
- Outstanding reliability

APPLICATION

- Welding
- Cladding

- > Surface treatment
- Li battery manufacture

BWT Laser 500W DDL (Direct Diode Laser) is designed for precision materials processing. With two optional modes, continuous mode and pulse mode, HAZ (heat affected zone) can be minimized. The system is designed for outstanding reliability and can be operated in harsh industrial application environment.

BWT Laser 500W DDL are suitable for many applications, such as welding, cladding, Li battery soldering, etc.



Technical Specification

Optical Character

Power	500W
Wavelength	915 / 976nm
Output Fiber Core Diameter	330µm
Cable Length	10m or Customized
Beam Delivery	QBH
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
Overall size and weights	
Weights	< 35Kg
Outline Feature	153 mm*482mm*378mm
Electronic Character	
Voltage	Single Phase, 220±20V, AC, PE, 50/60Hz
Power Consumption	2.4 kW
Control Interface	RS232
Water Cooling Parameters	
Minimum Water Cooling Capacity	1.5 kW
Temperature Settings	25 °C (Laser Module), 30 °C (QBH)



Cooling Tubes Size (External)	Φ12mm
Cooling Water Flux	>6L/min
QBH Cooling Water Flux	1.5~2.0L/min

Note: The back reflection will affect the performance and life of the direct diode laser. It is necessary to use the output laser when it is 8° – 10° away from the vertical direction of the surface.



