



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**
- **Libattery manufacture**

BWT laser 6000W single mode Yb-doped fiber lasers features high beam quality near diffraction limits 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 6000W fiber lasers are suitable for many applications, such as precision machining, 3D printing, metal plates processing, Libattery soldering, etc. Materials can be processed include steels, aluminum based and nickel based alloys, copper, titanium alloy, ceramics and many others.

Technical Specification

Optical Character	
Power	6000W
Wavelength	1080 ± 10 nm
Output Fiber Core Diameter	50μm/100μm
Cable Length	15m 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
Overall size and weights	

Weights	< 70Kg
Outline Feature	420mm*600mm*900mm
Electronic Character	
Voltage	380 ± 20V,AC,PE,50/60Hz
Power Consumption	18kW
Control Interface	RS232
Water Cooling Parameters	
Minimum Water Cooling Capacity	12kW
Temperature Settings	25 °C (Laser Module), 30 °C (QBH)
Cooling Tubes Size (External)	Φ19mm
Cooling Water Flux	>55L/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.

