

Lightning Series Fiber Laser

Model: BFL-CW500



FEATURES

- Good beam quality
- Excellent power stability
- Excellent system reliability
- Easy-to-use control interface
- High electro-optical conversion efficiency
- Two operation modes: CW and Modulation
- Max modulation frequency up to 5kHz
- Cost effective and maintenance free

APPLICATION

- Precision cutting
- Surface treatment
- 3D printing (SLS/SLM)
- Precision welding
- Drilling
- Sheet metal processing

BWT Lightning series fiber lasers have excellent beam quality, and the beam can be focused close to the diffraction limit, which makes them perfect choices for precision processing. The two operation modes, CW and modulation, minimize heat-affected zone. Reliable performance, modular and all-fiber design, and robust case enclosing all optical and electronic components ensure that they can be used under strict industrial conditions.

BTW Lightning series fiber lasers can be used in wide application like precision processing, 3D printing, sheet metal processing, lithium-ion battery manufacturing, etc. The lasers can process various types of metal, including aluminum-based and nickel-based alloys, titanium alloys and alumina ceramics.

BTW professional laser application team, with good knowledge and experience, provides the best laser system solution for our customers all around the world.

SPECIFICATIONS

Optical Character	
Power	500W
Wavelength	1080±10 nm
Output Fiber Core Diameter	14, 20, 25 or 50 μm
Output Cable Length	12 m or Customized
Output Cable Connector	QBH
Aiming Beam	Red
Operation Mode	CW or modulation
Polarization	Random
Power Stability (25°C)	<±1.5% (2h)
Power Adjustment Scope	10%-100%
Max Modulation Frequency	5kHz
Size and Weight	
Physical Size (H×W×D)	80 mm×402 mm×296 mm
Weight	~ 14.5 kg
Electronic Character	
Power Supply	Single Phase, 220±20 V, AC, PE, 50/60 Hz
Power Consumption	1.5 kW
Control Interface	RS232/AD
Water Cooling Parameters	
Minimum Water Cooling Capacity	1.0 kW
Temperature Settings	25°C (Laser Module), 30°C (QBH)
Cooling Tubes Size	O.D. Φ12 mm
Cooling Water Flow Rate (Laser Module)	>8 L/min
Cooling Water Flow Rate (QBH)	1.5~2.0L/min

DEMINSIONS (mm)

