# 3D Printing Fiber Laser

## BFL-CW500A



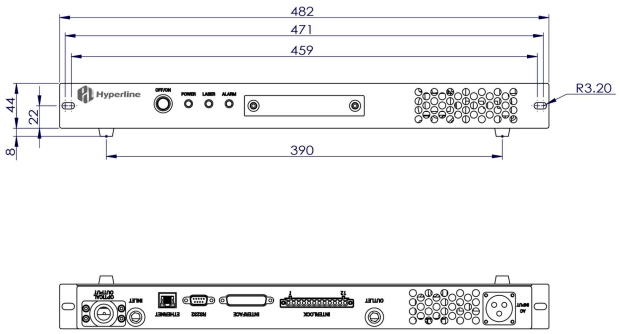
### Features:

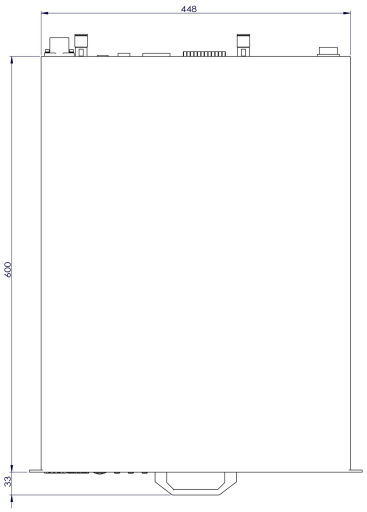
- Good beam quality $M^2$ < 1.1
- QBH or QCS options
- Excellent power stability
- Excellent system reliability
- Fast response

### Applications:

- 3D printing (SLS/SLM)
- Precision welding
- Photovoltaic cracking

## Package Dimensions (mm)




Hyperline Lightning series fiber lasers have Good 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.

Hyperline Lightning series fiber lasers can be used in wide application like precision processing, laser cleaning, 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.

# 3D Printing Fiber Laser

## BFL-CW500A

| Specifications | | Unit | Typical |
|---|---|---|---|
| Optical Data | Output Power | W | 500 |
| | Wavelength | nm | 1080±10 |
| | Fiber Core Diameter | μm | 14 |
| | Fiber Length | m | 5 |
| | Beam Quality | - | $M^2$ < 1.1 |
| | Fiber Connector | - | QBH or QCS |
| | Aiming Beam | - | Red |
| | Polarization | - | Random |
| | Power Stability（25℃） | - | < 2%（2h） |
| | Power Adjustment Scope | - | 10-100% |
| Electrical Data | Operation Mode | - | CW or Modulation |
| | Max Modulation Frequency | kHz | 50 |
| | Response Time | μs | ≤20 |
| | Power Supply | - | Single Phase, 200-240V, AC, PE, 50/60Hz |
| | Power Consumption | kW | 1.5 |
| | Control Interface | - | RS232/AD |
| Mechanical Data | Laser Size | mm | 44H*482W*600D |
| | Laser Weight | kg | 20 |
| Cooling Data | Min Water Cooling Capacity | kW | 1 |
| | Temperature | ℃ | Laser 25℃, QBH 30℃ |
| | Cooling Tubes Size （O.D.） | mm | ϕ12 |
| | Cooling Water Flow Rate (Laser) | L/min | > 6 |
| | Cooling Water Flow Rate (QBH) | L/min | 1.5~2 |

**Declaration** : information and specifications contained herein are deemed to be reliable and accurate. Hyperline reserves the right to change, alter or modify the design and specifications of these products at any time without notice.26-07

