

1500W-3000W

High-brightness CW Fiber Laser

Everfoton's high-brightness fiber lasers adopt a special optical design and process to suppress transverse mode instability and stimulated Raman scattering. It achieves a 14 μ m small core diameter single-mode output and has high brightness, high anti-reflection, excellent stability, etc. The laser is suitable for new energy, 3C, electrical industry and can be used for high-reflecting material (such as: copper, brass) cutting.



Applications

- Laser Cutting
- Laser Welding



Characteristics

- Multi-stages anti-back reflection protections
- High beam quality
- High stability
- High cutting quality

Specifications

| | Product Code | FFRC-1500SM-C | FFRC-2000SM-C | FFRC-3000SM-C |
|----------------------------------------|---------------------------------------|--------------------------------------|---------------|----------------------------------|
| Optical Parameters | Output Power (W) | 1500 | 2000 | 3000 |
| | Operating Mode | CW / Modulated | | |
| | Polarization State | Random | | |
| | Output Power Tunability (%) | 10 - 100 | | |
| | Beam Quality M ² (Typical) | 1.2 | | 1.3 |
| | Output Power Instability 25°C (%) | < 2 (2 hours) | | |
| | Emission Wavelength (nm) | 1080 ± 5 | | |
| | Spectrum Width FWHM (nm) | < 4 | | |
| | Modulation Frequency (kHz) | 5 | | |
| | Red Laser Power (µW) | > 200 | | |
| Fiber Delivery Cable Parameters | Output Type | QBH | | |
| | Length (m) | 5 | | 10 |
| | Core Diameter (µm) | 14 | | 20 |
| | Minimum Bending Radius (mm) | 200 | | |
| Electrical Characteristics | Operating Voltage (VAC) | 200 - 240, 1PH 50 / 60Hz | | 340 - 420, 3P5W 50 / 60Hz |
| | Max Power Consumption (kW) | 5 | 6.5 | 9 |
| | Control Mode | RS232 / AD / Ethernet | | |
| Other Characteristics | Operating Temperature (°C) | 10 - 40 | | |
| | Humidity (%) | 10 - 80 | | |
| | Cooling Method | Water Cooled | | |
| | Water-cooling Temperature (°C) | 25 ± 1 | | |
| | Water-cooling Flow (L/min) | > 20 (Laser), 1.5 - 2.5 (QBH) | | > 30 (Laser), 1.5 - 2.5 (QBH) |
| | Water-cooling Pressure (Bar) | 3 - 5 | | |
| | Joint Diameter (mm) | 12 | 16 | |
| | Dimensions (mm) | W482 x D575 x H133 (Include handles) | | |
| | Weight (kg) | 30 ± 3 | 40 ± 3 | 50 ± 3 |