

1500W-3000W

Single-mode CW Fiber Laser

Everfoton's single-mode fiber lasers adopt a special optical design and process to suppress transverse mode instability and stimulated Raman scattering. It achieves a 14μm 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 materials (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-2000-SM-C	FFRC-3000-SM-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		