300-1000W
High-stability CW Fiber Laser

Everfoton's High-stability CW Fiber Laser with sealed design, which ensures the reliability of the product while achieving high power stability, single-mode laser beam quality. The QBH or QCS armored fiber cable are optional. With fast response to DI/AI control inputs, it will satisfy the most demanding applications such as 3D printing, photovoltaic cell manufacturing, micro-processing and fine-welding.

Applications

- 3D printing
- Photovoltaic cell manufacturing
- Precision cutting
- Precision welding

Characteristics

- Single-mode laser beam quality
- Excellent Long-term power stability
- Fast response
- Integrated remote monitoring

SPECIFICATIONS

Optical Characteristics

Model	FFRC-300-H	FFRC-500-H	FFRC-1000-H
Output Power (W)	300	500	1000
Operating Mode	CW / Modulated		
Polarization	Random		
Power Range (%)	10 - 100		
Beam Quality (M^2)	1.1		
Output Power Instability at 25℃ (%)	< 1 (24 Hours)		
Central Wavelength (nm)	1080 ± 5		
Spectrum Width FWHM (nm)	< 4		
Beam Ellipticity (%)	≥ 96		
Modulation Frequency (kHz)	20		
Red Laser Power (μW)	> 200		

Output Cable Parameters

Output Mode	QBH / QCS		
Cable Length (m)	3	5	
Output Fiber Core Diameter (μm)	14		
Minimum Bending Radius of Cable (mm)	200		

Electrical Characteristics

Operating Voltage (VAC)	200 - 240V, 1PH 50 / 60Hz		
Rated Power Consumption (kW)	1	2	3
Control Mode	RS232, AD, Ethernet		

Other Parameters

Operating Temperature (℃)	10 - 30
Relative Humidity (%)	10 - 80
Storage Temperature (℃)	- 20 - 60
Cooling Method	Water Cooled
Water-cooling Temperature (℃)	25 ± 1
Water-cooling Flow (L/min)	> 10 (Laser), 1.5 - 2.5 (QBH)
Water-cooling Pressure (Bar)	3 - 5
Joint Diameter (mm)	12
Dimensions (W*D*H) (mm)	482 x 428 x 133 (including handle)
Weight (kg)	20 ± 3