QCW Fiber Laser

Everfoton's QCW Fiber Laser features multiple control modes, enabling flexible switching between CW/QCW modes and customer-defined pulse waveform output. Laser output energy is stable, making it suitable for applications requiring long pulse widths and high pulse energy. It can be a perfect substitute for traditional YAG lasers, offering simpler maintenance. It is widely used in precision welding/cutting.

Applications

- Precision cutting
- Ceramic scribing

Characteristics

- High laser beam quality
- Multiple protection against high reflection
- Stable energy output
- Integrated remote monitoring

SPECIFICATIONS

Optical Characteristics

Model	FFRQ-750/1500-H	
Operating Mode	CW / Modulated	
Maximum Continuous Power (W)	250	
Maximum Average Pulse Power (W)	750	
Maximum Peak Power (W)	1500	
Maximum Pulse Energy (J)	75	
Pulse Width (ms)	0.05 - 50	
Power Range (%)	10 - 100	
Beam Quality (M^2)	1.2	1.3
Output Power Instability at 25℃ (%)	< 1 (2 Hours)	
Central Wavelength (nm)	1080 ± 5	
Spectrum Width FWHM (nm)	< 6	
Modulation Frequency (kHz)	20	
Red Laser Power (μW)	> 200	

Output Cable Parameters

Output Mode	QBH	
Output Fiber Core Diameter (μm)	14	20
Cable Length (m)	5	10
Bending Radius of Cable (mm)	200	

Electrical Characteristics

Operating Voltage (VAC)	200 - 240V, 1PH 50 / 60Hz
Rated Power Consumption (kW)	5.5
Control Mode	RS232, AD, Ethernet

Other Parameters

Operating Temperature (℃)	10 - 40
Relative Humidity (%)	10 - 80
Cooling Method	Water Cooled
Water-cooling Temperature (℃)	25 ± 1
Water-cooling Flow (L/min)	> 8 (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)	30 ± 3