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 welding
- Precision cutting

Characteristics

- Internal control waveform editing
- Multiple protection against high reflection
- Low noise, maintenance-free operation
- Integrated remote monitoring

SPECIFICATIONS

Optical Characteristics

Model	FFRQ-150/1500-A
Operating Mode	CW / Modulated
Maximum Continuous Power (W)	250
Maximum Average Pulse Power (W)	150
Maximum Peak Power (W)	1500
Maximum Pulse Energy (J)	15
Pulse Width (ms)	0.05 - 50
Power Range (%)	10 - 100
Beam Quality (M^2)	1.2
Beam Quality BPP (mm x mrad)	< 3
Output Power Instability at 25°C (%)	< ±1.5 (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	RQB	
Output Fiber Core Diameter (μm)	14	100
Cable Length (m)	5	10
Bending Radius of Cable (mm)	200	

Electrical Characteristics

Operating Voltage (VAC)	200 - 240V, 1PH, 50 / 60Hz / 42 - 55DC (Optional)
Rated Power Consumption (kW)	5.5
Control Mode	RS232, AD, Ethernet

Other Parameters

Operating Temperature (°C)	10 - 40
Relative Humidity (%)	10 - 80
Waveform Editing (Group)	8
Cooling Method	Air Cooled
Dimensions (W*D*H) (mm)	482 x 575 x 133 (including handle)
Weight (kg)	30 ± 3