12000-30000W
Multi-module CW Fiber laser

Everfoton's High-power CW Fiber Laser has the characteristics of high electro-optical efficiency, protection against high reflection, compact structure and convenient system integration. It is suitable for sheet metal cutting, welding and drilling. The optimized output beam energy distribution provides good cutting and welding performance for medium to thick plates.

Applications

- Laser cutting
- Laser welding
- Laser drilling

Characteristics

- High-efficiency cutting of medium to thick plates
- High electro-optical efficiency
- Multiple protection against high reflection
- Integrated remote monitoring

SPECIFICATIONS

Optical Characteristics

Model	FFSC-12000	FFSC-20000	FFSC-30000
Output Power (W)	12000	20000	30000
Operating Mode	CW / Modulated		
Polarization	Random		
Power Range (%)	10 - 100		
Beam Quality BPP (mm x mrad)	< 4		
Output Power Instability at 25°C (%)	< ±1.5 (2 Hours)		
Central Wavelength (nm)	1080 ± 5		
Spectrum Width FWHM (nm)	5 - 8		
Modulation Frequency (kHz)	5		
Red Laser Power (μW)	> 200		

Output Cable Parameters

Output Mode	QD / LOE	Q+ / LOE	
Output Fiber Core Diameter (μm)	100		
Cable Length (m)	25 / 30		30
Bending Radius of Cable (mm)	200		

Electrical Characteristics

Operating Voltage (VAC)	340 - 420V, 3P4W, 50 / 60Hz		
Rated Power Consumption (kW)	36	60	100
Control Mode	RS232, AD, Ethernet		

Other Parameters

Operating Temperature (°C)	10 - 40		
Relative Humidity (%)	10 - 80		
Cooling Method	Water Cooled		
Water-cooling Temperature (°C)	25 ± 1		
Water-cooling Flow (L/min)	> 100 (Laser) , 2 - 4 (QD)	> 200 (Laser) , 2 - 4 (Q+)	> 250 (Laser), > 4 (Q+)
Water-cooling Pressure (Bar)	5 - 6		
Joint Diameter (mm)	32	38	
Minimum Cooling Capacity (kW)	25	40	60
Dimensions W*D*H (mm)	575 x 1200 x 650 (excluding lights and casters)	800 x 1200 x 730 (excluding lights and casters)	
Weight (kg)	300 ± 15	500 ± 20	650 ± 20