VBP CW Fiber Laser

Everfoton's VBP Fiber Laser can offer a total output power of up to 12kW. It utilizes the self-developed ring beam fiber and combiner to provide core and ring output modes. The power is independently adjustable with a power ramp up and down function, ensuring no spattering during welding and significantly enhancing processing quality and efficiency.

Applications

- Power battery pack
- Intelligent automobile manufacturing
- 3C electronics

Characteristics

- Independently adjustable fiber core/ring core power
- Multiple protection against high reflection
- Waveform editing, Power ramp up and down
- Integrated remote monitoring

SPECIFICATIONS

Optical Characteristics

Model	FFSC-2000/2000-VBP
Operating Mode	CW / Modulated
Output Power (W)	4000
Core Output Power (W)	2000
Ring Output Power (W)	2000
Power Range (%)	10 - 100
Ring Beam Quality (mm x mrad)	Central < 4, Ring < 30
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	QBH
Cable Length (m)	15
Central Core Diameter (μm)	100
Ring Core Diameter (μm)	600
Bending Radius of Cable (mm)	200

Electrical Characteristics

Operating Voltage (VAC)	340 - 420V, 3P4W 50 / 60Hz
Rated Power Consumption (kW)	12
Control Mode	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)	> 50 (Laser), 1.5 - 2.5 (QBH)
Water-cooling Pressure (Bar)	3 - 5
Joint Diameter (mm)	25
Minimum Cooling Capacity (kW)	8
Dimensions W*D*H (mm)	600 x 750 x 650 (excluding lights and casters)
Weight (kg)	180 ± 10