



High Power Industrial Fiber Lasers

Convergent Photonics new CF Series fiber lasers, are designed to deliver the best performance in material processing to better suit the customer needs. The highly efficient and compact CF series high power fiber lasers with output power up to **4kW**, guarantees low maintenance operation, high reliability and superior cutting performances.

Convergent Photonics Fiber lasers are very easy to integrate in different machine configurations.

Main advantages in installing fiber lasers include:

- Flexible laser beam delivery, up to 30m delivery fiber length
- High electro-optical efficiency, over 30% wall-plug efficiency
- Patented high speed electronic shutter [100 ms]
- Highly resistant to back-reflection, compatible with all metal materials including high-reflective copper and brass sheets
- Simple, compact, maintenance free and robust design

New CF Series features include:

- Optimized beam profile for both thin and thick sheet metal cutting and welding
- Capable cutting up to 20 mm mild steel



Convergent Photonics Fiber lasers can be equipped with two different types of feeding fibers (QBH or proprietary design), either 50 μm core or 100 μm core to be specified by Customer according to the desired optical parameters.

	CF2000 / CF3000 / CF4000
	100 μm feeding fiber
Feeding fiber core diameter	100 μm
Feeding fiber length	20 m (30 m under request)
Minimum bend radius	200 mm
Output connector	QBH
Beam Parameter Product (1/e ²)	3,5 mm mrad

CF lasers metal cutting typical capabilities are given below. Real performances depend also on beam delivery system and cutting head design.

	CF2000	CF3000	CF4000
Mild Steel	15 mm		20 mm
Stainless Steel	8 mm		12 mm
Aluminum	6 mm		8 mm
Copper	4 mm		5 mm
Brass	4 mm		5 mm

General Specifications

	CF2000	CF3000	CF4000
Max Average Power	2000W	3000W	4000W
Wavelength	1080µm		
Operating Environment (min/max)	5° C / 50° C (40° F / 120° F)		
Relative Humidity	< 95% non-condensing		
Diode Pointing Laser	Wavelength 635/658 nm Power <1 mW		
Electrical Power Consumption	7kW	10 kW	12,5 kW
Voltage	360 - 490 VAC, 3-phase		
Dimensions W / H / L	830mm / 1020mm / 830mm		
Weight	220 Kg	250 Kg	290 Kg
Connections	Water (optional) Drain (optional) 0.75 inch hose barb (x2) 8 mm tube fitting		
Ingress Protection Rating (IEC60529)	IP54 (NEMA13 equivalent)		

