Convergent

CF1000 - High Power Industrial Fiber Lasers

Convergent Photonics CF1000 fiber lasers, with output power up to **1kW**, guarantee low maintenance operation, high reliability and superior performances. **CF1000** model is designed to deliver the best performances in material processing to better suit the customer needs.

Main advantages in installing fiber lasers include:

- Flexible laser beam delivery, up to 10m standard delivery fiber length, longer lengths upon request
- High electro-optical efficiency, up to 32% wall-plug efficiency
- High peak energy in pulsed mode
- Simple, compact, maintenance free and robust design

Cutting capability (thickness value in mm)

MILD STEEL	10
STAINLESS STEEL	4
ALUMINUM	4
COPPER	3
BRASS	3

CF1000 application guide is given below:

- Cutting
- Welding
- Additive Manufacturing







Convergent

General Specifications

		F1000	
Nominal Output Power		1000W	
Power Range		150 W - 1050 W	
Power Stability		Typ. ± 1%	
Pulsing Frequency		0 -5 kHz	
Wavelength		1070nm - 1080nm	
Polarization		Random	
Beam Parameter Product (1/e ₂)		1 mm*mrad or 2 mm*mrad	
Feeding fiber core diameter		20 μm or 50 μm	
Feeding fiber length		5 m or 10 m	
Minimum bend radius		100 mm	
Output connector		QBH	
Safety		PLd	
Diode Pointing Laser		Wavelength 635/658 nm Power <1 mW	
Electrical Power Consumption		6 kW - 6.5 kW EOL (chiller included)	
Voltage		200/400/480 Vac 3P	
Operating Environment (min/max)		5° C / 50° C	
Relative Humidity		< 95% non-condensing	
Laser Cooling 35% Glycol Mix	Cooling Cap.		
	Pressure	Internal chiller	
	Flow		
	Temp.		
Process Fiber Cooling 35% Glycol Mix	Cooling Cap.	Internal chiller supplies the external optics, 0.3 kW	
	Pressure	3 bar	
	Flow	3 l/Min	
	Тетр	25°C - 35°C	
Dimensions W x H x L		600 x 1000 x 1200 mm	
Weight		400 Kg	
External coolant connections		1/2 inch hose barb (x2)	
Protection Degree (IEC60529)		IP54 (NEMA13 equivalent)*	

*Note: as per IEC 60825-1:2007, EN 60825-1:2007, FDA Regulation 21 CFR Chapter J 1040.10

