



CF1000 - High Power Industrial Fiber Lasers

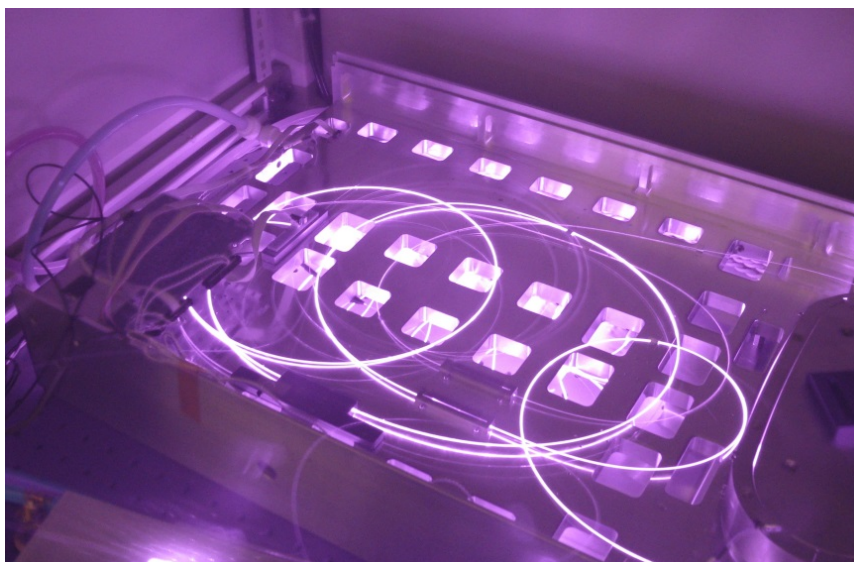
Convergent Photonics CF Series fiber laser, are designed to deliver the best performance in material processing to better suit the customer needs. The highly efficient and compact CF series high power fiber lasers with output power up to 1kW, guarantees low maintenance operation, high reliability and superior 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 5m 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
- 19" Rack configuration integrated Power Supply with communication cards
- Available in two configurations: 19" Rack configuration integrated Power Supply with communication cards or in cabinet with integrated double chiller



General Specifications

		CF1000	
		CABINET VERSION	19" RACK CONFIGURATION
Nominal Output Power		1000W	
Power Range		150 W - 1050 W	
Power Stability		Typ. \pm 1%	
Pulsing Frequency		0 -5 kHz	
Wavelength		1070nm - 1080nm	
Polarization		Random	
Beam Parameter Product (1/e ₂)		0.7 mm*mrad - 1 mm*mrad	
Feeding fiber core diameter		20 μ m or 50 μ m	
Feeding fiber length		5 m	
Minimum bend radius		100 mm	
Output connector		QBH	
Safety		PLd	
Diode Pointing Laser		Wavelength 635/658 nm Power <1 mW	
Electrical Power Consumption		6,5 Kw	3.3 kW - 4.0 kW EOL
Voltage		200/400/480 Vac 3P	90/230/264 Vac 1P
Operating Environment (min/max)		5° C / 50° C	20° C / 35° C
Relative Humidity		< 95% non-condensing	
Laser Cooling 35% Glycol Mix	Cooling Cap.	Internal chiller	2.3 kW*
	Pressure		3 bar - 7 bar
	Flow		7 l/Min - 10 l/Min
	Temp.		20 \pm 1 °C
Process Fiber Cooling 35% Glycol Mix	Cooling Cap.	Internal chiller supplies the external optics, 0.3 kW	0.3 kW
	Pressure		1.5 bar- 4 bar
	Flow		2 l/Min
	Temp		27°C - 33°C
Dimensions W x H x L (mm)	Power Supply	600 x 1000 x 1200	501 x 133 x 787 (3U)
	FLM		501 x 89 x 787 (2U)
Weight	Power Supply	400 Kg	64 Kg
	FLM		23.5 Kg
Connections	Coolant	½" barbed fitting for optics cooling output	10 mm push lock fitting (x2)
Protection Degree (IEC60529)		IP54	Must be located inside an IP54 cabinet

*Note: in case of rack configuration additional 1kW suggested for power meter cooling during service.