

## The UF-20 Fiber Laser Based On Our Solid State Laser Technologies And Experiences In Nd:YAG And Nd:YVO4 Laser Marking Systems.



Fiber Laser is preferred because it is compact, consumes very little energy, and is easily integrated, yet it places a high concentration of power to the work surface. The fiber laser technology offers no warm up time, higher output powers, superior beam quality and maintenance free operation.

Several types of laser are used in many materials processing applications, but it is fiber laser that have revolutionized many of these applications through a combination of improved optical performance, better systems flexibility, high component yield, long uptime (100,000 hours MTBF) and improved reliability.

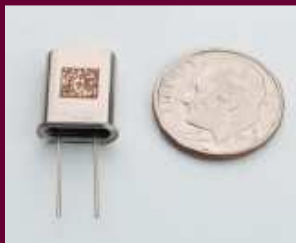
**Small spot size.** UF-20 Fiber lasers spot size is small, predictable and consistent at all power level across all pulse sequences and during the entire life of the laser – a feature critical to many marking applications. Due to the smaller spot size, better image resolution (DPI) can be achieved and markings will be sharper and cleaner regardless of substrate. The UF-20 has a high beam quality which allows it to be used in sensitive marking, cutting and welding applications without damaging sensitive components and the capability to achieve depth into harder metals like **titanium** and **tool steel**.

### Marking, Cutting and Scribing:

- Stainless steel
- Aluminum
- Carbide
- Nickel
- Titanium
- Cast Iron
- Chrome
- Painted Metal Alloy
- Multi-coated Metals
- Plastics
- Painted Plastics
- Backlit buttons
- Polycarbonate
- Polypropylene
- PCV
- Rubber

### UF-20 Features:

- 20 Watt Laser Marking Head
- 163 mm F-Theta Focusing lens
- Diode Controller
- Laptop Computer
- Easy to use Software
- Mounting Stand
- Z-axis Fixture System
- Eye protection glasses
- Two-Year System Warranty



<b>Marker Head</b>	Laser Source	Yb-doped YFL
	Wavelength	1,064 nm
	Pulse Energy	1 mJ@20kHz
	Laser Source Output*	20 W (equivalent CW Mode)
	Peak Power*	Up to 10 kW
	Pulse width	~100ns @ 20kHz
	Beam spot diameter	~15 µm (100 mm F-theta Lens)
		~20 µm (163 mm F-theta Lens)
		~30 µm (254 mm F-theta Lens)
		~60 µm (420 mm F-theta Lens)
	Maximum marking area	60 mm x 60 mm (100 mm F-theta) 100 mm x 100 mm (163 mm F-theta) 150 mm x 150 mm (254 mm F-theta) 250 mm x 250 mm (420 mm F-theta)
	<b>F-theta lenses</b> available	100, 163, 254, 330, 420 mm back focal length
	Cooling system	Air Cooling
	Operational temperature range*	~10-40o C
Operational humidity range*	80 % non condensing	
Weight	5.0 kg (without F-theta lens)	
Dimensions**	L260 x W149 x H141 mm (without F-theta lens)	
<b>Controller</b>	Operational temperature range	~10-40oC
	Operational humidity range*	80 % non condensing
	Cooling system	Air Cooling
	Power source	AC 100-240V, 5A, 50/60Hz
	Consumption power	400 W nominal, 500 Wmax.
	Weight	13kg (with set of cables)
Dimensions**	L430.2x W440.7 x H132.4 mm	
<b>Computer (Optional)</b>	Specification	PC, notebook, industrial PC; w/Windows XP Professional
	Power source	AC 100-240V, 50/60Hz – for notebook AC 115/230 selectable, 50/60 Hz – other PCs
<b>Software</b>	SymbolWriter Pro	

\* Units stated at maximum output parameters without F-Theta lens.

\*\* Allow a minimum of 2" (5 cm) of open space around the Marker Head and Controller for a free air circulation. Additionally, ensure at least 4" (10 cm) of open space at the rear of the controller and marker head for cable attachment and maintenance access.

Distributed by

**COMTECH**  
NORTH AMERICA

*25 Years of Providing Quality Solutions  
for Manual and Automated Assembly*

PO Box 309 • Bloomfield Hills, MI 48303

Phone: (248) 594-2400

Fax (248) 594-2403

[www.comtechnorthamerica.com](http://www.comtechnorthamerica.com)