



## LF Series - 160-1000W Yb:Fiber Laser Welders

The LF Series fibers lasers offer the precise control needed for small component welding. A large touchscreen pendant enables clear visibility of process schedule parameters, and an intuitive interface enables quick and easy programming.

### Key features LF Series - 160-1000W Yb:Fiber Laser Welders

- Integrated laser system - Complete system with laser engine, controller, touchscreen interface and chiller (if necessary) integrated into chassis.
- Micro welding - The laser is available in either single or multi-mode configuration. Precise control of the laser's pulse width and peak power enables fine micro welding processes. Penetrations up to 4 mm in steels, titanium and nickel alloys are possible using continuous mode operation.
- Spot and seam welding - 10 segment pulse shaping enables best quality spot welding results. Ramp up and ramp down feature controls welding results at the ends of seam welds.
- Excellent power stability - Fine applications require high stability of the laser source for reliable processing. The LF Series offers excellent power and pulse to pulse stability with an internal air-to-water cooling mechanism which maintains stability irrespective of ambient air temperature.
- Accessories - Full range of focus heads including inline, 90 degree with process viewing via a camera, and through the lens illumination options. Galvo heads are also available. Ultra compact heads are available if space is a premium.

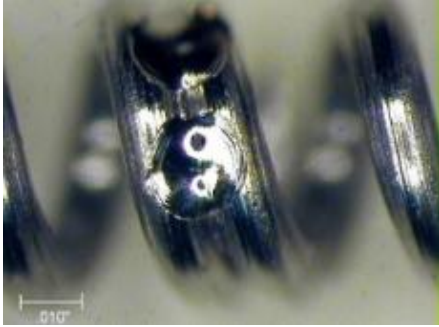
## Specifications LF Series - 160-1000W Yb:Fiber Laser Welders 1/2

Maximum output	160 Watts (LF-160A) (M2 = multimode)	200 Watts (LF-200A) (M2 = 1.1 or multimode)	300 Watts (LF-300A) (M2 = 1.1)
Beam quality	M2 = 1.1 or multimode	M2 = 1.1 or multimode	M2 = 1.1 or multimode
Pulse width	0.02-99 ms	0.02-99 ms	0.02-99 ms
Pulse width resolution	0.001 ms	0.001 ms	0.001 ms
Repetition frequency	1-50.000 Hz, CW	1-50.000 Hz, CW	1-50.000 Hz, CW
Oscillation wavelength	1070 nm	1070 nm	1070 nm
Positioning guide beam	Built-in visible laser (red)	Built-in visible laser (red)	Built-in visible laser (red)
Output stability over operating temperature range	± 3%	± 3%	± 3%
Voltage	240 V +/- 10% VAC 50-60 Hz single phase	240 V +/- 10% VAC 50-60 Hz single phase	240 V +/- 10% VAC 50-60 Hz single phase
Current	25 A RMS	25 A RMS	25 A RMS
Cooling	Air Cooling	Air Cooling	Air Cooling
Operating temperature (°C)	5 - 40	5 - 40	5 - 40
Operating humidity	5-85% RH (non condensing)	5-85% RH (non condensing)	5-85% RH (non condensing)
External communication (RS232)	Baud Rate: Variable 9600-115200)	Start bits: 1	Data bits: 8
Certification	CE Approved	CE Approved	CE Approved
Dimensions HxWxD (mm)	939,8 x 520,7 x 825,5	939,8 x 520,7 x 825,5	939,8 x 520,7 x 825,5
Weight (in kg)	136,3	136,3	136,3

## Specifications LF Series - 160-1000W Yb:Fiber Laser Welders 2/2

Maximum output	400 Watts (LF-400A) (M2 = 1.1)	500 Watts (LF-500A) (M2 = 1.1 or multimode)	1000W (LF-1000A) (M2 = 1,1 or multimode)
Beam quality	M2 = 1.1 or multimode	M2 = 1.1 or multimode	M2 = 1.1 or multimode
Pulse width	0.02-99 ms	0.02-99 ms	0.02-99 ms
Pulse width resolution	0.001 ms	0.001 ms	0.001 ms
Repetition frequency	1-50.000 Hz, CW	1-50.000 Hz, CW	1-50.000 Hz, CW
Oscillation wavelength	1070 nm	1070 nm	1070 nm
Positioning guide beam	Built-in visible laser (red)	Built-in visible laser (red)	Built-in visible laser (red)
Output stability over operating temperature range	± 3%	± 3%	± 3%
Voltage	240 V +/- 10% VAC 50-60 Hz single phase	240 V +/- 10% VAC 50-60 Hz single phase	240 V +/- 10% VAC 50-60 Hz single phase
Current	25 A RMS	25 A RMS	25 A RMS
Cooling	Air Cooling	Air Cooling	Air Cooling
Operating temperature (°C)	5 - 40	5 - 40	5 - 40
Operating humidity	5-85% RH (non condensing)	5-85% RH (non condensing)	5-85% RH (non condensing)
External communication (RS232)	Parity: Even	Stop bits: 1	Flow control: none
Certification	CE Approved	CE Approved	CE Approved
Dimensions HxWxD (mm)	939,8 x 520,7 x 825,5	939,8 x 520,7 x 825,5	939,8 x 520,7 x 825,5
Weight (in kg)	136,3	136,3	136,3

Product applications LF Series - 160-1000W Yb:Fiber Laser Welders



Medical spring attachment



Needle cutting



Medical component assembly

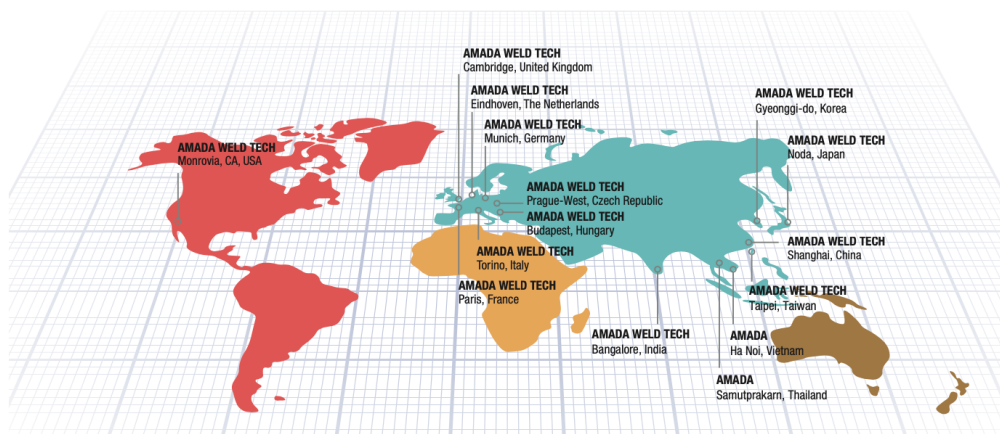
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## AMADA WELD TECH

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