

## Applications

- Micro-machining
- Marking
- Scribing
- Fiber Optic Sensing
- Research



## Description

Amonics' specialized fiber laser (AFL) series, is a compact standalone turnkey equipment to deliver up to 30W output power and 1mJ pulse energy in 1064 nm and 1550 nm range in pulse or CW operation. Based on proprietary all fiber design, Amonics fiber lasers are maintenance free. No after installation service is required.

In pulse operation, the laser delivers up to 20kW peak power with 10ns to 20ns adjustable pulse width. The pulse repetition rate can be triggered by external TTL signal.

Amonics fiber laser are ideal candidate for wide range industrial applications.

## Key Features

- CW and Pulse operation
- Up to 1mJ pulse energy
- 10 to 20ns tunable pulse width
- Up to 50W output power
- Optical feedback protection
- Back reflection monitoring
- Turnkey operation
- Maintenance free
- Linear polarization
- Highly reliability
- Two year warranty

**AFL Specifications**

Parameter	Unit	Specification
Mode of Operation	-	Pulse or CW
Average Output Power	W	5, 10, 20, 30, 50
Pulse Energy	mJ	0.25, 0.5, 1
Pulse Width	ns	10 to 20
Repetition Rate	kHz	10 to 100 (external TTL trigger)
Wavelength	nm	1064, 1550 range
Laser Linewidth	nm	Typ. 0.2, Max. 0.5
Polarization	-	Linear or Random
Beam Quality M <sup>2</sup>	-	Typ. 1.1, Max. 1.2
Isolation	-	inter-stage and output

\* Other output power models are available upon request

**General Environmental Parameters**

Parameter	Unit	Specification
Operation Temperature Range	°C	0 to +40
Storage Temperature Range	°C	-10 to +70
Power Supply	VAC	90 – 240, 47 – 63Hz
Dimensions	mm	3U rack, 515(W) x 450(L) x 150(H)
Control	-	Keylock switch, optical output power
LCD Display	-	Output power, Pump laser current
Computer Interface	-	RS232 / TCP/IP Ethernet
Protection	-	Safety Interlock, Back Reflection
Optical Port	-	Main Output, Seed laser, Output Tap
Output Termination	-	Collimator, Bare fiber

**Ordering Information**

Product Code	AFL- <b>www-xx-y-zz</b>	<b>www</b> : Wavelength in nm <b>xx</b> : Output Power in dBm <b>y</b> : R for 19" Rackmount case <b>zz</b> : CL for collimator NC for bare fiber
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Amonics undertakes a continuous and intensive product development to ensure its products perform to highest technical standards. As a result, the specifications in this document are subject to change without notice.

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