



# Q-Switched Pulsed Fiber Laser FLA Series

Data Sheet



## Overview

The FLA series is a family of all fiber pulsed lasers that can emit single pulse energy levels up to 20uJ. The FLA series laser is constructed with features of pulse duration <50ns, high output power stability, good beam profile, ultra-compact design, long lifetime, cost effectiveness, and easy operation. It is commonly used in laser radar, life science, microelectronics, scientific research, physical experiment, material processing, and many other applications.

## Features

- Available wavelengths: 532nm, 1064nm, and 1550nm
- Pulsed operating mode
- Single pulse energy 100nJ to 20uJ
- Pulse duration <50ns
- Ultra-compact design

## Applications

- Laser radar
- Life science
- Microelectronics
- Scientific research
- Physical experiment
- Material processing

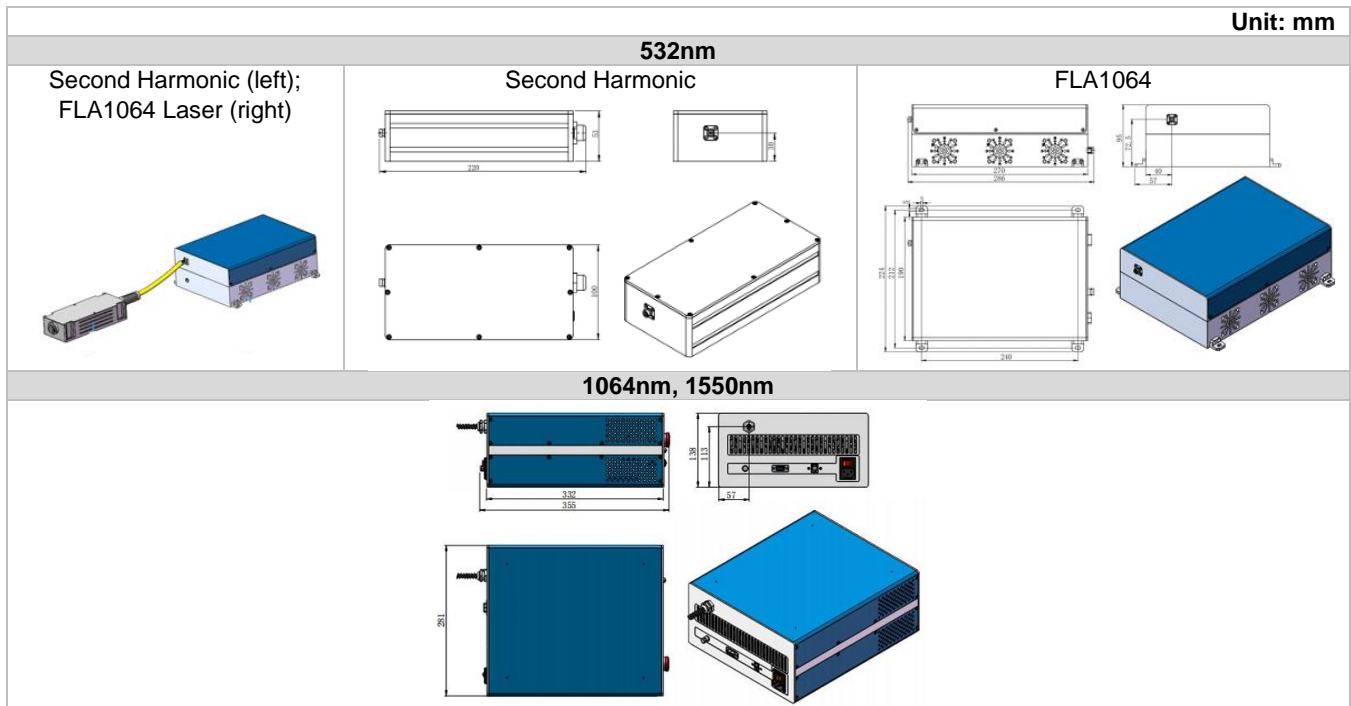
## 532-1550 nm Specifications

Parameter	FLA532	FLA1064		FLA1550	
Wavelength	532±1 nm	1064±1 nm		1550±1 nm	
Operating mode	Pulsed	Pulsed		Pulsed	
Single pulse energy	100nJ	>1 uJ, >2 uJ	>1 uJ, >5 uJ, >10 uJ, >20 uJ	>1 uJ, >2 uJ	>1 uJ, >5 uJ, >10 uJ, >20 uJ
Pulse width	One fixed value between 0.5-5ns Adjustable: 0.5~5ns, 5~50ns	One fixed value between 0.5-5ns Adjustable: 0.5~5ns	One fixed value between 5-50ns Adjustable: 5~50ns	One fixed value between 0.5-5ns Adjustable: 0.5~5ns	One fixed value between 5-50ns Adjustable: 5~50ns
Energy stability (rms, over 4 hours)	<3%, <2%	<3%		<3%, <2%	
Repetition frequency	1-1000 Hz	1-1000 Hz		1-200 Hz	
Transverse mode	TEM <sub>00</sub>	TEM <sub>00</sub>		TEM <sub>00</sub>	
M <sup>2</sup> factor	<1.2	<1.1		<1.1	
Polarization state	>15dB	Random / >15dB		Random / >15dB	
Warm-up time	<15 min	<15 min		<15 min	
Operating temperature	15-35°C	15-35°C		15-35°C	
Expected lifetime	10,000 hours	10,000 hours		10,000 hours	
Warranty	10 months	10 months		10 months	

## Remarks:

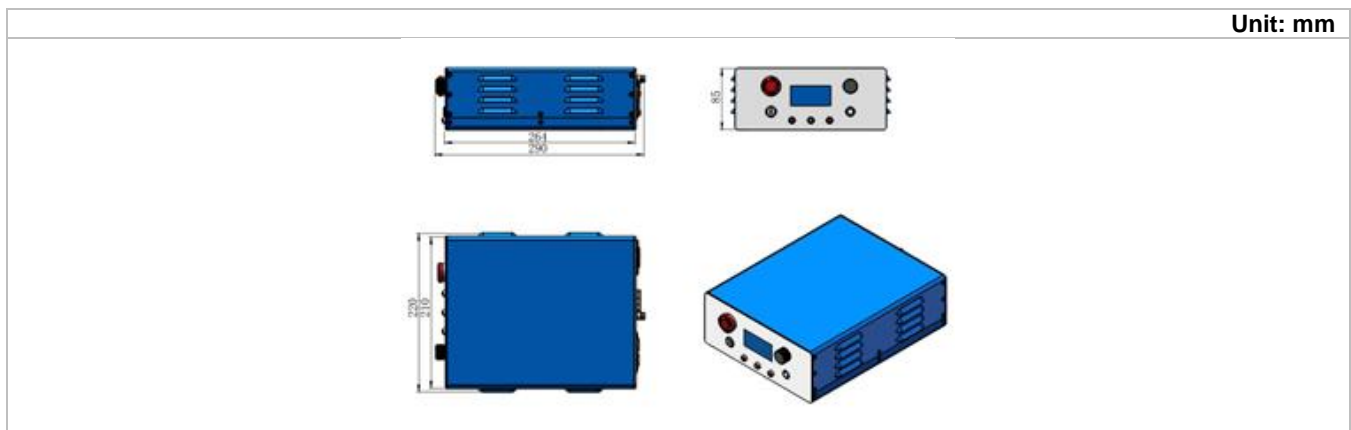
- The fiber lasers are designated solely as OEM components for incorporation into the customer's end products. It is the customer's responsibility to comply with FDA requirements of FDA 21CFR, section 1040.10 and 1040.11 for complete laser products. For the code of FDA regulations, please refer to [FDA Performance Standards for Light-Emitting Products](#) for detailed information.
- Specifications are subject to change without notice.

**FLA Series Laser Head Dimensions**



Parameter	Second Harmonic (532nm)	1064nm, 1550nm
Dimensions	220(L) x 100(W) x 53(H) mm <sup>3</sup>	355(L) x 281(W) x 138(H) mm <sup>3</sup>
Weight	1.0 kg	5 kg
Beam height from base plate	30 mm	113 mm

**FLA Series Power Supply Dimensions**



Parameter	FLAO Power Supply
Dimensions	290(L) x 220(W) x 85(H) mm <sup>3</sup>
Weight	3 kg
Input voltage	220V AC

## Ordering Information

For more information, please contact Lasermate directly at [sales@lasermate.com](mailto:sales@lasermate.com).

Part Number Configuration FLA[1][2][3][4]				
FLA = Laser Model Series	[1] = Wavelength	[2] = Pulse Energy	[3] = Energy Stability	[4] = Pulse Width
	532= 532nm 1064= 1064nm 1550= 1550nm	1N= 100nJ 1= 1uJ 2= 2uJ 5= 5uJ 10= 10uJ 20= 20uJ	E= <3% 2= <2%	(value)= Fixed value A1= Adjustable 0.5~50ns A2= Adjustable 5~50ns

Note: The above specifications are subject to change without notice.