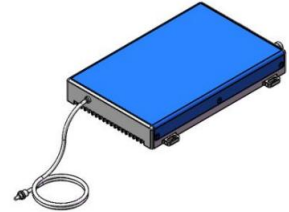




FLNS Series

High-Frequency Pulsed Fiber Lasers (1030nm, 1064nm & 1550nm)

Data Sheet



Overview

The FLNS Series is a family of high-frequency all-fiber pulsed lasers providing stable, high-repetition-rate pulsed output at 1030nm, 1064nm, and 1550nm. Featuring adjustable pulse durations from 5ns to 100ns, repetition rates up to 10MHz, excellent beam quality with $M^2 < 1.2$, and high peak power stability, these compact fiber lasers provide a reliable and cost-effective solution for advanced sensing, scientific, and industrial applications. With FC/APC fiber output and an optional fiber collimator, the FLNS Series offers flexible integration into a wide range of pulsed laser systems.

Features

- Available wavelengths: 1030nm, 1064nm, and 1550nm
- High-frequency pulsed operation
- All-fiber laser architecture
- Adjustable pulse duration: 5–100ns
- Adjustable repetition rate up to 10MHz
- Excellent beam quality ($M^2 < 1.2$)
- High peak power stability
- FC/APC fiber output
- Optional fiber collimator
- Compact and reliable design
- Long operating lifetime >10,000 hours
- Cost-effective and easy system integration

Applications

- Laser radar (LiDAR)
- Optical fiber sensing
- Life science
- Microelectronics
- Gas detection
- Scientific research
- Optical simulation

1030-1550 nm Specifications

Parameter	FLNS1030	FLNS1064	FLNS1550
Wavelength	1030±1 nm	1064±1 nm	1550±1 nm
Operating mode	Pulsed		
Peak power	1 uW-500 mW	1 uW-500 mW	1 uW-10 mW (fixed)
Power stability (rms, 4 hours ±3°C)	<3%, <2%, <1%		
Pulse duration	5-100 ns (adjustable)		
Repetition frequency	1 Hz-100 kHz, 1 Hz-10 MHz (adjustable)		
M ² factor	<1.2		
Fiber connector	FC/APC, Collimator optional		
Fiber length	1 m		
Fiber jacket	PVC, Metal optional		
Beam diameter	4±1 mm (Collimator output)		
Polarization state	Random / >15dB		
Warm-up time	<5 min		
Cooled method	Conduction cooled		
Operating temperature	15-35°C		
Operating voltage	12V/11.5A		
Expected lifetime	>10,000 hours		

Remarks:

1. Specifications of the Q-switched pulsed laser are based on the laser pulsed at the specified repetition rate. If the laser is run at a different repetition rate, the output characteristics may change.
2. Specifications are subject to change without notice.



FLNS Series Laser Head Dimensions

FLNS1030/1064/1550		FLNS1030/1064P		Unit: mm

Parameter	FLNS1030/1064/1550	FLNS1030/1064P
Dimensions	191(L) x 130(W) x 25(H) mm ³	196(L) x 131(W) x 48(H) mm ³
Weight	1 kg	1.5 kg
Beam height from base plate	16 mm	35 mm
Beam exit (from side)	37.5 mm	33 mm
Operating voltage	12V/11.5A	12V/11.5A
Notes	Peak power 200-500 mW	Peak power 1 uW-500 mW

FLNS Series Power Supply Dimensions

		Unit: mm

Parameter	100-240VAC Power Supply
Dimensions	350(L) x 185(W) x 60(H) mm ³
Weight	0.7 kg
Input voltage	100-240 VAC

Ordering Information

For more information, please contact Lasermate directly at sales@lasermate.com.

Part Number Configuration FLNS[1]-[2][3][4]				
FLNS = Laser Model Series	[1] = Wavelength	[2] = Peak Power	[3] = Power Stability	[4] = Collimator
			E= <3% 2= <2% D= <1%	Blank= Not included C= With collimator

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

