



## Applications

Seeding  
femtosecond and  
picosecond fiber and  
DPSS lasers

Ultrashort pulse fiber seeder for laser amplifier  
1020-1070nm, 1-10ps, 15-30MHz, 1-50mW



Smooth  
ultrashort pulse  
generation

## Features

No consumable  
components

Robust to external  
disturbances

Very high quality pulses  
and spectrum

Highly customizable output  
parameters

Ultra wide spectrum  
compressible down to 30 fs

Neolit seeders are novel sources of ultrashort laser pulses, free of consumable components like SESAM, which makes them exceptionally long-lasting.

The all-fiber design ensures high environmental stability against vibrations and thermal fluctuations.

The integration is very simple because of a compact single box, passively-cooled construction.

High quality temporal and spectral shape of the pulses guarantees excellent results at the output of the laser system.



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# Specifications

	Neolit	Neolit AMP	Neolit BB
Central wavelength	1020 – 1070 nm		1040 nm
Pulse duration (directly from the fiber) <sup>1)</sup>	1 – 5 ps	5 – 10 ps	7 ps
Spectral bandwidth (FWHM)	4 – 12 nm	8 – 12 nm	20 – 70 nm
Average power	1 – 5 mW	20 – 50 mW	20 – 50 mW
Pulse repetition rate (factory fixed)	15 – 40 MHz		
Polarization	linear, >100:1 extinction		
Optical output	FC/APC connector or bare fiber	FC/APC connector with end cap or bare fiber	
RF signal interface	SMA		
Available control interfaces	USB, CAN		
Powering requirements	12 ± 2 V, max. 3 A		
Operating temperature	15 - 45 °C		
Mechanical dimensions	194 x 135 x 40 mm		

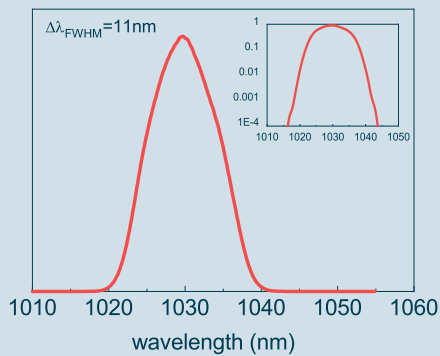
<sup>1)</sup> Pulses from the seeder are externally compressible to within 10% of the transform limit

<sup>2)</sup> Customized versions including additional amplifier, fiber pulse picker, pulse stretcher are possible

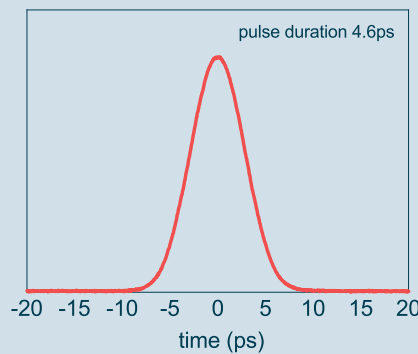
<sup>3)</sup> Indylit lasers are class 4 laser products. Avoid eye or skin exposure to direct or scattered laser light

<sup>4)</sup> World patented technology: US10038297, JP6276471, EP3178137, CN106575849

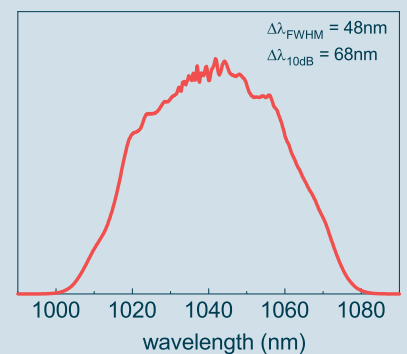
## Performance



Spectrum of Neolit laser (20MHz, 2mW)  
Spectrum in log scale



Autocorrelation function of the pulses from the same laser



Spectrum of Neolit BB laser (30MHz, 30mW)

## Drawings

