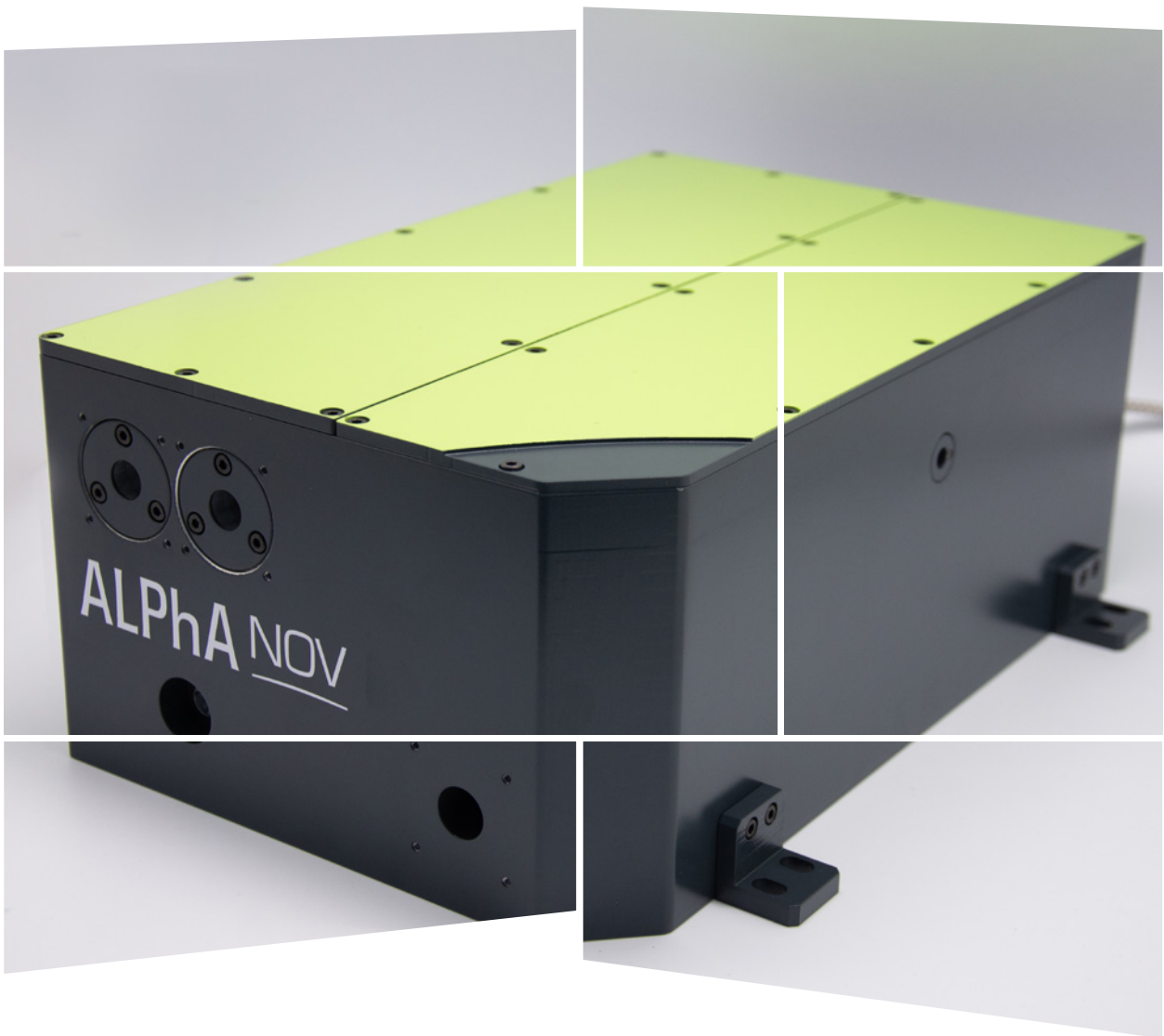


# Ti-PULS

New generation of sub-40 fs  
fiber laser at 800 nm



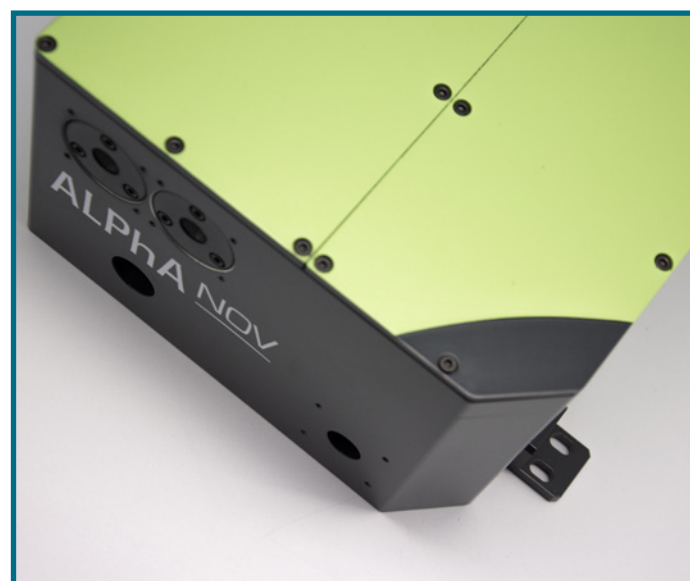
**ALPhA** NOV

Optics & Lasers Technology Center

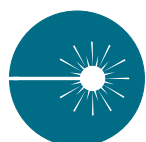
# Ti-PULS

## New generation of sub-40 fs fiber laser at 800 nm

Ti-PULS, specially designed to seed Ti:Sapphire amplifier, is a new product completing our PULS product line. This laser benefits from our legacy in modelling, designing of innovative fiber laser sources and components.



Based on all-PM fiber frequency doubled femtosecond mode-locked oscillator, our laser offers a unique, monolithic solution to seed Ti:Sapphire amplifiers, for applications in multiphoton imaging, and biophotonics.



### FEATURES

- Cost-effective alternative to existing Ti:Sapph seeders
- Air-cooled, compact, robust optical integration
- Environmentally stable output
- Lowest pulse duration and high pulse energy available for a fiber laser
- [Laser customization](#)



### APPLICATIONS

- Seeding Ti :Sapph lasers
- Biophotonics
- Ultrafast Time Domain Spectroscopy
- Multiphoton Microscopy
- Supercontinuum generation



### OPTIONS

- Stretcher (> 200 ps), GVD post-compensation
- Fiber delivery
- 1600 nm & 800 nm output

## Technical Specifications

### Optical

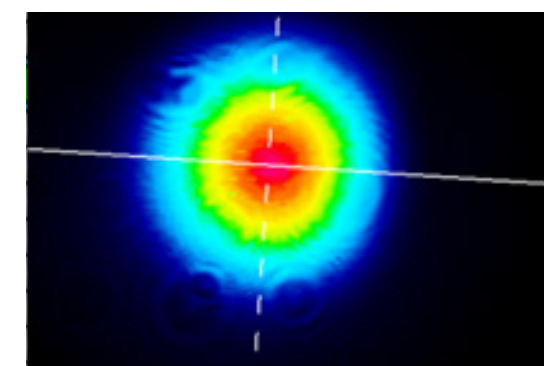
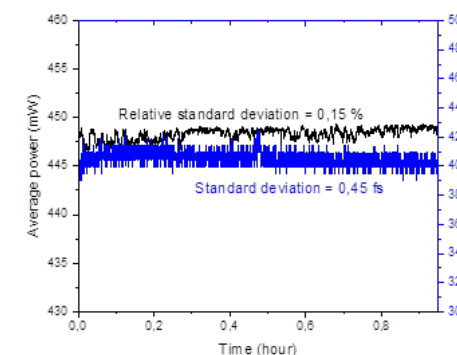
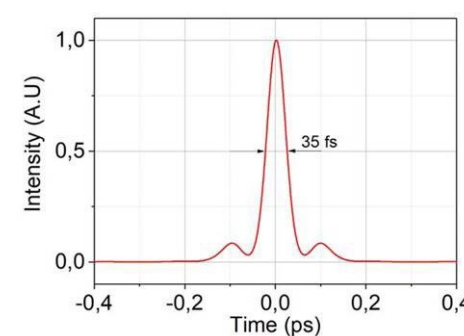
Wavelength	800 nm +/- 10
Average power	> 100 mW @ 40 MHz > 200 mW @ 80 MHz
Spectral width	> 22 nm
Pulse duration	< 40 fs
Repetition rate	40 MHz or 80 MHz
M <sup>2</sup>	< 1.2
Ellipticity	> 0.92
Beam waist diameter	2 - 5 mm
Output coupling	Free space (fibered delivery as an option)
Power stability	~ 1% RMS
Polarization	Linear (PER > 20 dB)

### Electrical

External interface	USB, RS232, output trigger
Software interface	ALPhANOV GUI, serial communication protocol
Compatibility & libraries	Ubuntu / Windows 7 / 10 ; DLLs-Hexa

### Mechanical

Dimensions laser head / laser controller dimensions	31 x 20 x15 cm / 4U rack
Cooling	Air



Specific developments upon request

# ALPhA NOV

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