

# MIR-PULS

Tunable fiber laser source  
sub 300 fs; 1800 - 2100 nm



**ALPhA** NOV

Optics & Lasers Technology Center

# MIR-PULS

## Tunable fiber laser source sub 300 fs; 1800 - 2100 nm

MIR-PULS 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.



Part of the PULS family product, MIR-PULS delivers 20 mW of sub-300 fs TFL pulses at 40 Mhz, over the spectral range of 1800-2100 nm. It offers a unique solution for applications such as bioimaging, optogenetics, spectroscopy or seed source for Thulium/Holmium based amplifier systems.

### Features

- Cost-effective short pulse tunable source
- Air-cooled, compact, robust optical integration
- Environmentally stable output
- All PM fiber , alignment-free
- [Laser customization](#)

### Applications

- Optogenetics
- Spectroscopy
- Bioimaging
- Th/Ho amplifier systems

### Options

- SHG @ 920 nm

Specific developments upon request

## Technical Specifications

### Optical

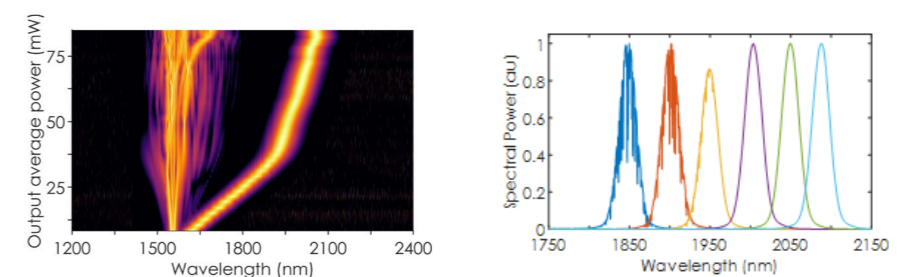
Wavelength	Tunable 1800 - 2100 nm
Average power	> 20 mW
Spectral width	> 20 nm
Pulse duration	< 300 fs
Repetition rate	40 MHz typ.
Output coupling	PM fiber (FC/APC & PC ; SC/APC & PC)
Power stability	1% RMS
Polarization	Linear (PER > 15 dB)

### Electrical

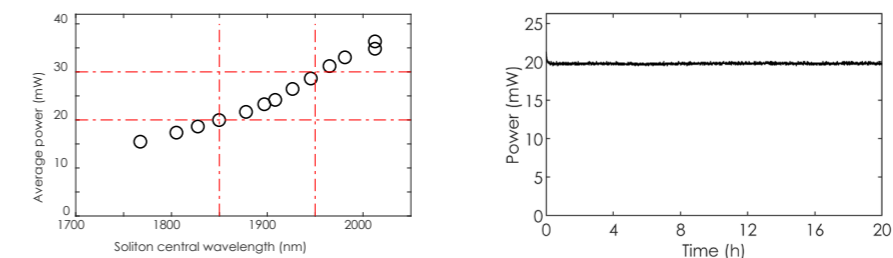
External interface	USB, RS232, output trigger
Software interface	ALPhANOV GUI, serial communication protocol
Compatibility & librairies	Ubuntu / Windows 7 / 10 ; DLLs-Hexa

### Mechanical

Dimensions laser head	30 x 30 x 9 cm
Cooling	Air



Evolution of the soliton central wavelength vs output average power.



Evolution of the soliton average power vs the soliton central wavelength and brun-in on 20 hours @1900 nm.

# ALPhA NOV

Optics & Lasers Technology Center

Institut d'optique d'Aquitaine

Rue François Mitterrand

33400 Talence - France

Ph. +33 (0)5 24 54 52 00

[www.alphanov.com](http://www.alphanov.com)