## **ABOUT US**

IRISIOME is a French startup company from Bordeaux, in France founded in 2015. The company is the result of a project valorization led by the CELIA Laboratory (CEntre Lasers Intenses et Applications) which was aiming at developing a user friendly and simple laser source for medical applications. Since the beginning of the project our team has strengthen its expertise by developing an innovative laser architecture which would be easily integrated in any experiment or system.

Willing to widen its offer and confront its laser sources to challenging applications, IRISIOME has created a new brand, IRISIOME Solutions, fully dedicated to the scientific and R&D markets. To be able to fulfill our users' specific requirements, we are making ourselves available to take up any challenge and new developments that will push our systems to the highest level of performance.





# **CONTACT US**



#### **IRISIOME SOLUTIONS**

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www.irisiome-solutions.com

High-end Tunable Picosecond Fiber Lasers for Sciences and R&D

### **OUR TECHNOLOGY**

We are developing fiber lasers in the near infrared, Our differentiation is based on two main innovations developed by Laser and electronics researchers from the CELIA (CEntre de Laser Intense et Application) and the LP2N (Laboratoire Photonique Numérique & Nanosciences).

The main benefit of our specific architecture is to offer a very user-friendly solution without giving up on versatility. Thank to the pulse gating technology, we can tune the pulse duration from ten's picoseconds to few nanoseconds and the repetition frequency from few MHz to few GHz. We also have the capability to deliver lasers that are wavelength tunable in the infrared.

Our team members have a long experience in development and industrialization of fiber laser technologies and dedicate their work to reach the highest level of quality and reliability.



Tunable wavelength in IR around 1  $\mu$ m and 1,5  $\mu$ m. SHG available



CW or pulsed with 35 ps to few ns pulse duration.



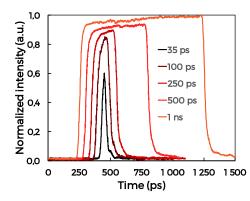
Tunable pulse repetition frequency up to 2 GHz.

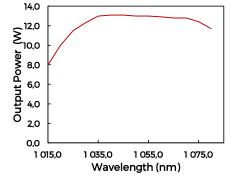


Multistage fiber amplifier from 20 mW to > 30 W.



Compact, turn key master/slave system.





Temporal pulse profile measured with a photodiode from 35 ps to 1 ns.

Wavelength tunability from 1020 nm to 1080 nm

#### **OUR APPLICATIONS**

One of our laser source was integrated into a dermatologic system and has successfully demonstrated on-site clinical results on tattoo removal. These tests have been conducted in partnership with the University Hospital of Nice in France.







This picture represents second harmonic generation imaging of fluorescent beads. It was obtained by the bio imaging group MOSAIC from the Institut Fresnel in Marseille, using a Sid Laser system.

http://www.fresnel.fr/mosaic

Other typical applications are:

- → Advanced microscopy,
- → Spectroscopy.
- → Bio-photonics,
- → Nonlinear optics.

#### **OUR PRODUCTS**

	SID	MANNY	SCRAT
Central Wavelength*	1550 nm or 1560 nm	1030 nm, 1064 nm,	1020 nm to 1080 nm
		1550 nm or 1560 nm	
Wavelength tuanbility	NO	NO	YES
Frequency doubling	YES	YES	NO
Avg. Output Power**	From 20 mW to > 30 W		
Power stability	< 2% RMS		
CW or Pulsed	Pulsed		CW
Pulse duration	35 ps	Tunable 35 ps to few ns	-
Timing jitter***	< 10 ps RMS		-
Repetition rate	Tunable 5 MHz to 2 GHz		-
Ext, synchronisation	Master/Slave		-
Polarization	Linear, > 20 dB		
Beam quality	Fibered output or free-space, $M^2 < 1,2$		
Cooling system	Air cooled		

<sup>\*</sup> Other wavelength available upon request

<sup>\*\*\*</sup> Depends on clock or sync signal







<sup>\*\*</sup> Typical average power in IR