

MANNY

Based on innovative pulse gating technology, the most flexible system with **tunable repetition rate AND pulse duration**



SID

A fixed pulse duration < 30 ps and **tunable repetition rate**

DIEGO

A fixed pulse duration from 350 fs to 20 ps and **tunable repetition rate from 10 MHz to 100 MHz, possibility of burst mode**

ABOUT US

IRISIOME is a French start-up 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) whose purpose was to develop a user-friendly and simple laser source for medical applications.

Since the beginning of the project our team has strengthened its expertise by developing an innovative laser architecture which would easily be integrated in any experiment or system.



HIGH-END TUNABLE PICOSECOND AND FEMTOSECOND FIBER LASERS

for
Scientific and Industrial
Applications




Willing to widen its offer and put its laser sources to the test of challenging applications. IRISIOME has created a new brand, IRISIOME Solutions, fully dedicated to the scientific and R&D markets. We stand ready to take up any challenge and new developments that will push our systems to the highest level of performance to comply with our users' specific requirements. Today our lasers are used in many routine applications.

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	SID Series	MANNY Series	DIEGO Series
Central Wavelength (1)	1030 nm, 1064 nm or 1550 nm, 1560 nm		
Frequency Doubling	YES	YES	NO
Pulse Duration	Fixed, ~25 ps	Tunable from 50 ps to few ns	Fixed, from 350 fs to 20 ps
Spectral Bandwidth	< 1 nm	< 0,2 nm	< 1 nm
Avg. Output Power (2)	Up to 30 W		
Max Pulse Energy (3)	>1 µJ		
Power Stability (4)	< 5 % RMS		
Timing Jitter (5)	< 3 ps RMS		
Repetition Rate	Up to 2 GHz, Burst capable		
Polarization	Linear, > 20 dB		
Synchronization	Master/Slave		
Beam Quality	Fibered output or free-space, M ² < 1,3		
Cooling System	Air cooled		

(1) Other wavelengths available upon request
(2) Depends on pulse repetition rate
(3) Depends on pulse repetition frequency
(4) Depends on test duration and stability of ambient temperature
(5) Depends on clock or sync signal

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WHAT IF YOUR LASER WAS SO FLEXIBLE THAT IT COULD EASILY ADAPT ?

ADJUSTABLE AND TUNABLE
repetition rate up to several GHz

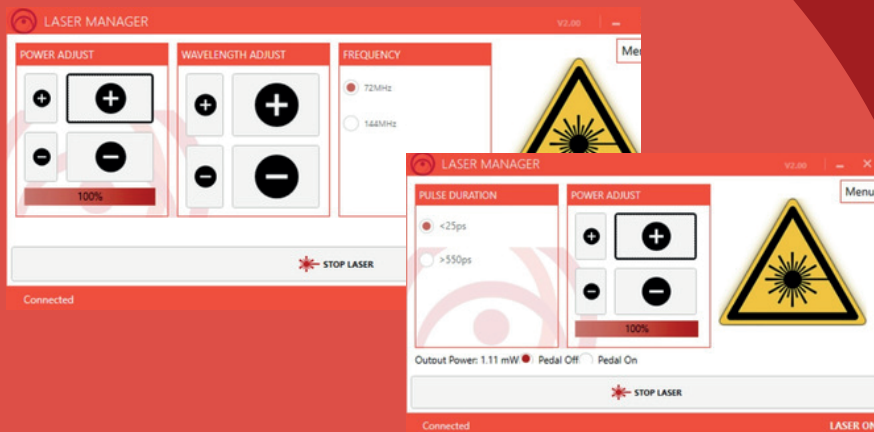
ADJUSTABLE AND TUNABLE
pulse duration

SEVERAL WAVELENGTHS
available in infrared and visible ranges

Adjustable average power up to **30 W**

Easy to use !

All Irisiome Solutions Lasers are TURN-KEY systems, no alignment is necessary. All the parameters can be controlled by the intuitive laser manager software.



OUR TECHNOLOGY



All the pulses are generated electronically which allows the tunability of the repetition rate on a large range.

Thanks to the PULSE GATING technology, the pulse duration can also be tuned from 50 ps to several ns on the same system.



Long Life

Compact Design

Stability over Time

Low Maintenance

Robust Industrial Housing



THE PERFECT SYNCHRONIZATION

All IRISIOME systems can be triggered internally or externally.

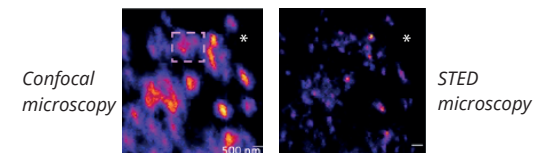
The jitter of IRISIOME SOLUTIONS lasers is extremely low to allow an ideal synchronization with other devices.

Tunability, top-hat temporal shape and very low jitter for Cathode photo excitation in **Particle Accelerators**.

Narrow spectral bandwidth and tunable pulse duration for **Picosecond Raman Spectroscopy**.

High GHz repetition rate in burst mode for **Micromachining**.

GHz repetition rate and several wavelengths in IR and visible ranges for **Quantum Application**.



Fluorescent 35nm nano-diamonds with a MANNY laser at 775nm

Pulse duration and repetition rate tunability for **Super-Resolution Microscopy**.

*Courtesy of Dr. J-B Trebbia from Prof. Lounis's team, LP2N Bordeaux