

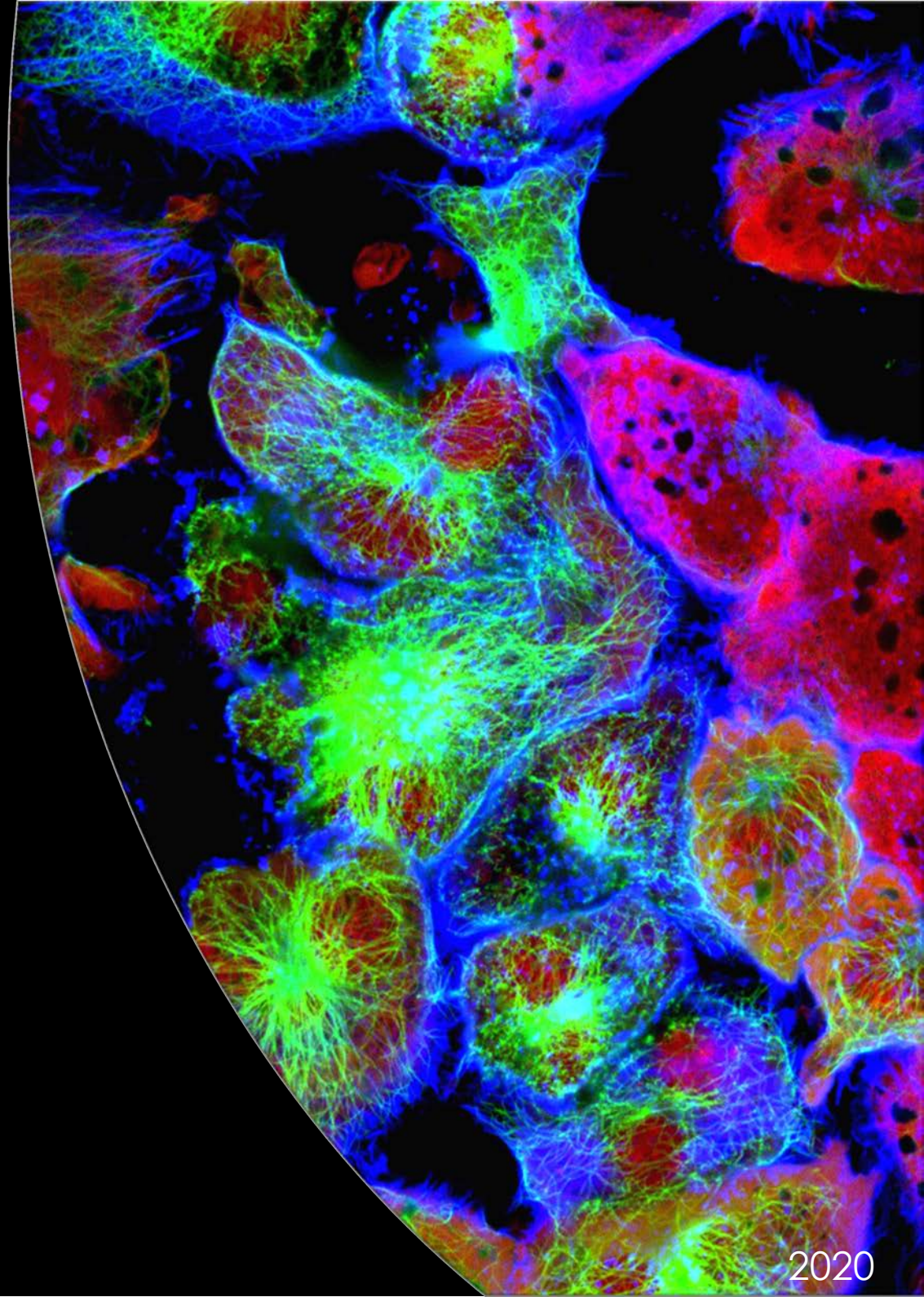
ONE PLATFORM FOR ALL COLORS

*Oxxiús*  
Simply Light

A laser design and manufacturing house bringing disruptive innovations to the market of visible lasers

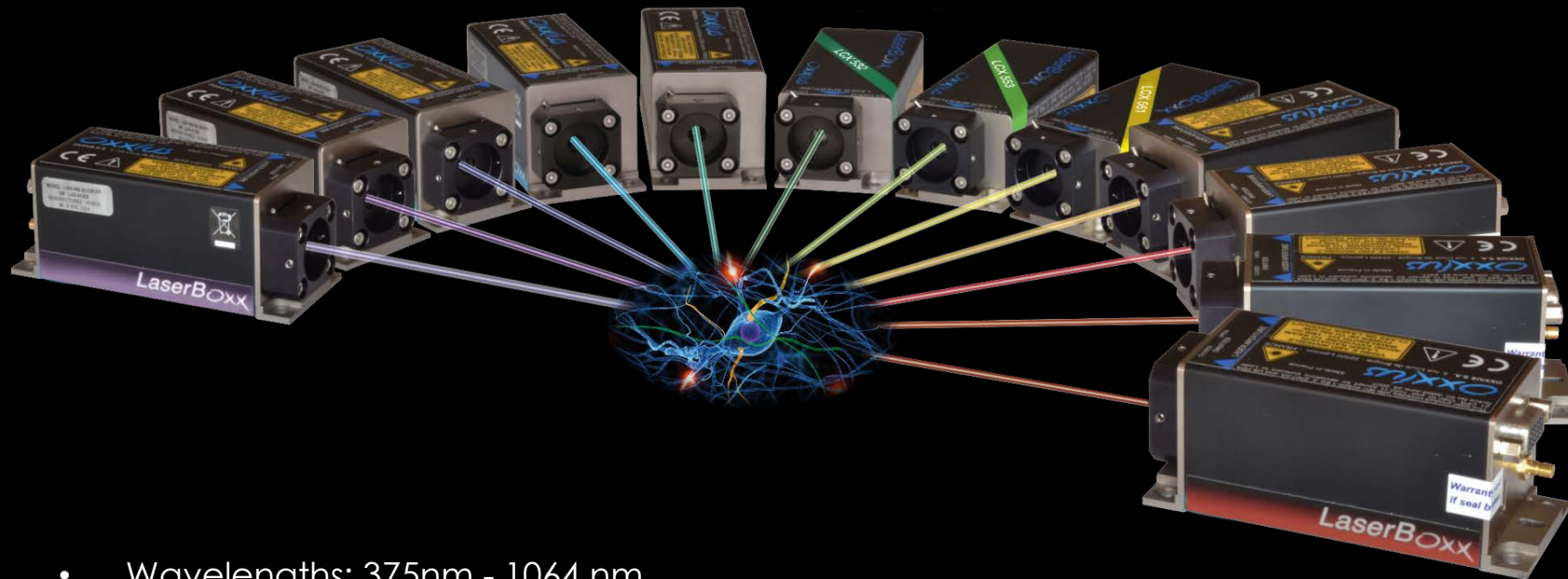
# WHO IS OXXIUS?

- Founded in 2002
- More than 60 employees
- Headquartered in Lannion France
- Full range of UV, visible, and IR, CW lasers
- Laser Diode and DPSS Laser Modules
- Market: OEM integrators and research labs
- World-class level of quality, customer care and service
- ISO 9001-2000 certification



# Product Range

## A full range of UV, visible and IR, CW Lasers



- Wavelengths: 375nm - 1064 nm
- One of the few CW Laser manufacturers that can offer both Laser Diodes and DPSS lasers
- A key technology at the heart of its DPSS lasers: a proprietary, alignment-free monolithic resonator

# Our Products – Low Noise Lasers



## LBX, LPX, and LCX LaserBoxx Modules

- 375nm up to 1064nm (others under request)
- Up to 500 mW
- Low profile laser head (32 mm)
- Lowest power consumption
  - $\leq 12$  W for LCX's, any wavelength,  $< 200$  mW
  - $\leq 15$  W for LCX-532 & LPX-640, 500 mW
  - $\leq 15$  W for LCX-561, 300 mW
- Tailored beam diameter capability (0.6 - 1.4mm)

## Options:

### Fiber coupling

Rugged, compact, fiber coupling options for polarization maintaining fiber, standard single mode fiber or multimode fiber.

### Electro-Mechanical shutter

The ACX-SHTE is a compact and affordable electro-mechanical shutter. It is mounted directly on the LCX or LPX in place of the standard manual shutter. The fiber coupling and other options are fully compatible with the electro-mechanical shutter.

The ACX-SHTE is actuated via the LCX or LPX embedded software or via a standard TTL signal.

### Heat Sink

Forced air heat sink for LBX, LCX with 5V PSU

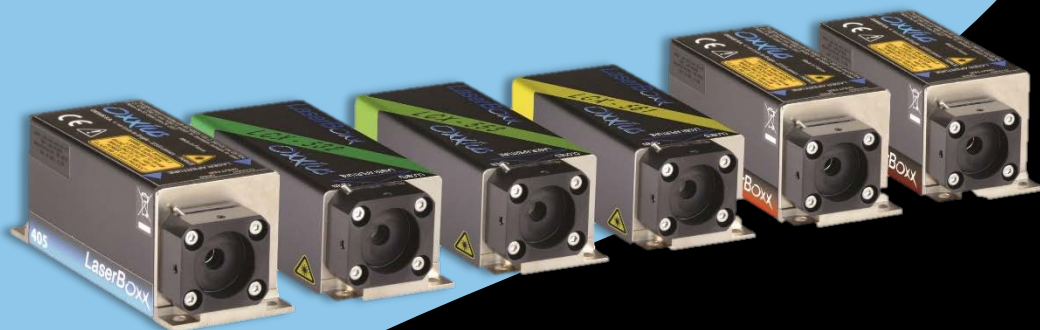
### Isolator

Mounted isolator available at 532, 561, 6xx and 785nm

### Clean-up filter

Filter to eliminate optical noise

# Our Products – Single Longitudinal Mode Lasers



## LBX, LSX, and LCX LaserBoxx Modules

- 532nm up to 1064nm (others under request)
- Up to 500 mW
- Exceptional wavelength stability – 1pm
- Lowest power consumption
  - $\leq 12$  W for LCX's & LPX's, <200 mW
  - $\leq 15$  W for LCX-532 & LCX-1064, 500 mW
  - $\leq 15$  W for LCX-561 300 mW
- Low profile laser head (32 mm)
- Tailored beam diameter capability (0.6 - 1.4 mm)

## Options:

### Fiber coupling

Rugged, compact, fiber coupling options for polarization maintaining fiber, standard single mode fiber or multimode fiber.

### Electro-Mechanical shutter

The ACX-SHTE is a compact and affordable electro-mechanical shutter. It is mounted directly on the LCX or LPX in place of the standard manual shutter. The fiber coupling and other options are fully compatible with the electro-mechanical shutter.

The ACX-SHTE is actuated via the LCX or LPX embedded software or via a standard TTL signal.

### Heat Sink

Forced air heat sink for LBX, LCX with 5V PSU

### Isolator

25 dB isolator mounted in shutter.

### 532nm Ultra Low Frequency

Option for LCX-532S provide 70dB side mode suppression ratio. Dedicated for Raman spectroscopy. Available up to 200mW

# Our Products – High Power Laser Diode Modules



## LBX LaserBoxx Modules

- 375nm up to 940nm (others under request)
- Up to 2000 mW
- High power laser diode modules
- Excellent performance and reliability
- Multimode elliptical beam
- Tailored beam size available

## Options:

### Multimode Fiber coupling

The ACX-FCMM option offers a cost-effective and compact way to couple the LaserBoxx beam into a multimode fiber. The coupling efficiency exceeds 80%.

Standard patch cord configuration:

- 0.22 numerical aperture,
- SMA connector,
- 2 m fiber length

Other configurations on demand

### Heat sink

- Forced air heat sink for LBX, LCX with 5V PSU
- Optional air-forced heat sink for maximum ambient temperature of 38 degrees Celsius.

# Our Products – L1C Platform



## L1C Platform for advanced Features

- L1C-MPA – Motorized Power Attenuator
- L1C-AOM – Acousto-Optic Modulator – DC 3MHz
- L1C-ISO – >25dB Isolation and >85% transmission Isolator
- FSTS (Fast Mechanical Shutter -200Hz)
- Fiber coupling options available
- It comes standard with the electromechanical shutter

## Options:

The L1C and the longer L1C+ platforms offer efficient, compact and cost-effective solutions to add advanced features to the LCX, LPX, LSX or LBX-S lasers.

### MPA Motorized Power Attenuator

- 0 to 100% range
- Maintains beam quality & Spectral properties
- Analog input control
- USB and RS232 interface

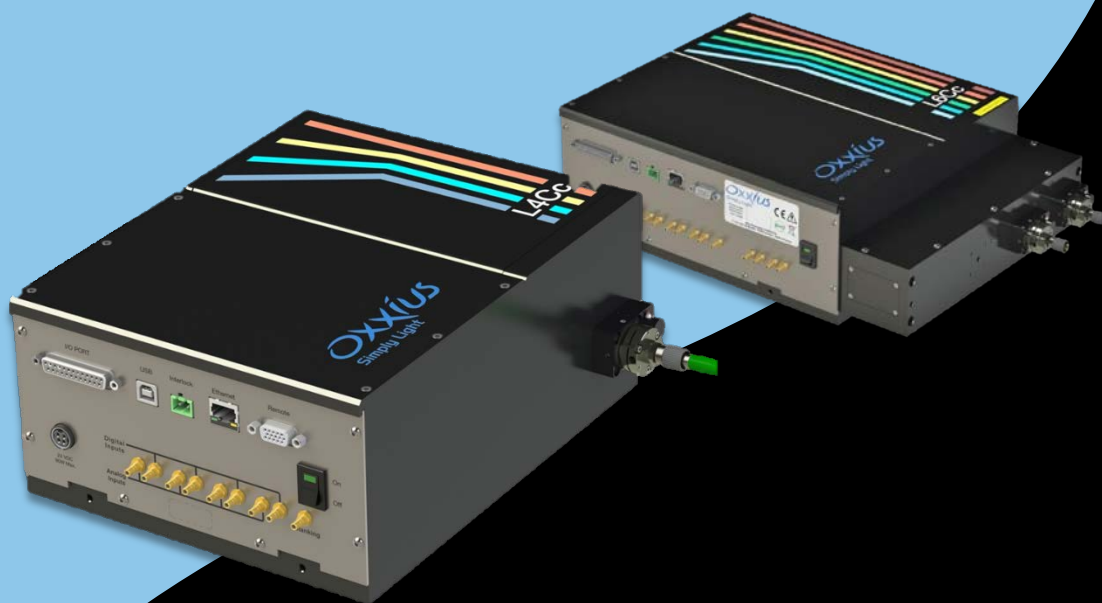
### AOM Acousto-Optic Modulator

- DC-3MHz bandwidth
- > 85% power transmission
- USB interface
- Analog digital inputs

### ISO Isolators

- Compact
- High power versions

# Our Products – Laser Combiners



## L4Cc, L6Cc Compact Wavelength Combiners

- All-in-one multicolor laser source
- Up to 6 lasers per combiner (additional laser lines can be added through extension modules)
- 375 up to 1064 nm (others under request)
- Up to 500 mW
- Highest efficiency and stability
- Flexible by design
- Expandable

## Options:

**Fiber coupling** - Oxxius propose the compact SuK® or the user friendly Kineflex® fiber couplers with RGBV fiber at standard 0.12 NA. The fiber output options are FC/APC or FCP8 connectors or free space collimators on request

**Repositionable fiber coupling** - The SuK® fiber coupler is available with magnetic repositionable support.

**Two-channel outputs** - The L4Cc can be set with two independent output ports. Each port will deliver one or several wavelengths.

**Extension module MDUAL** - Provides two outputs with the possibility to balance the output power between each port. The split ratio accuracy is +/-5%. Designed for light sheet microscopy

**Extension module FSTM** - Provides fast switching between two outputs up to 30Hz (< 5 ms switching time)

**Extension module FLPM** - This will economically route all lines on the selected output. This is not meant for frequent switching. Recommended when only one L4Cc is used with two microscopes.

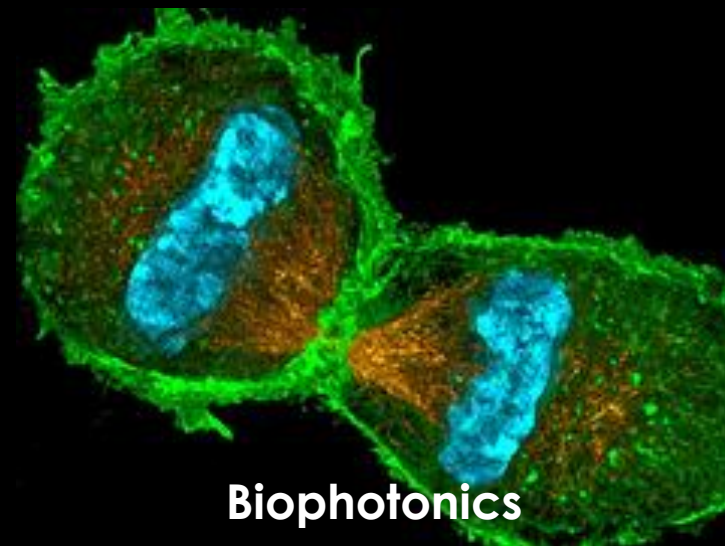
**Extension module L+1** - Provides one additional LBX laser, combined on the main channel or fully independent with its own output port

**Extension module MNDF** - Provides a motorized neutral density filter when low output power is needed.

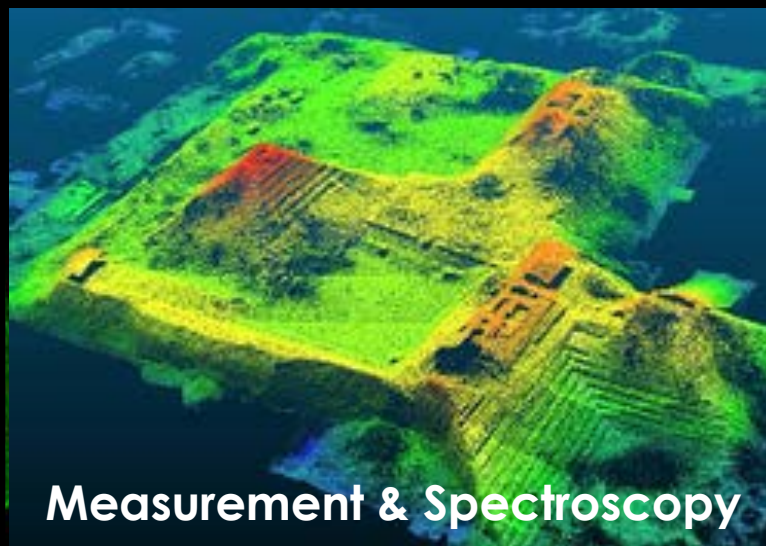
**Extension module AOTF** - AOTF modulator - one output



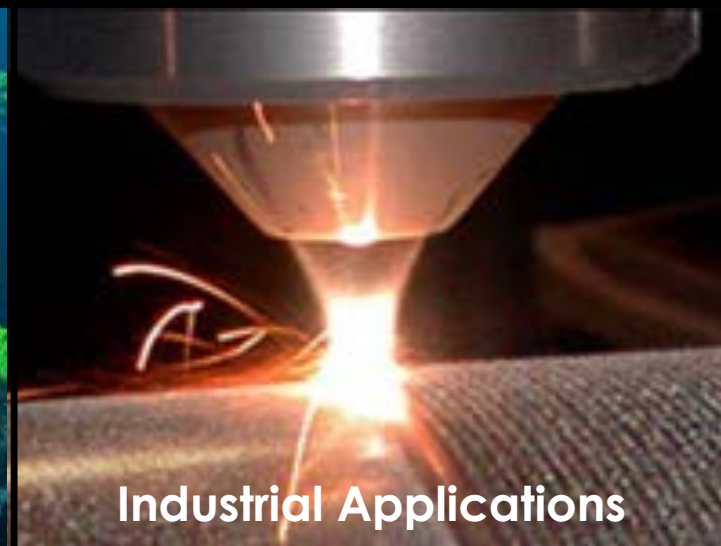
# Applications and Markets



**Biophotonics**



**Measurement & Spectroscopy**



**Industrial Applications**

- Fluorescence Imaging
- DNA Analysis, Sequencing
- Confocal/3D Microscopy, STED
- Flow/Imaging Cytometry
- Optogenetics
- Ophthalmology

- Raman Spectroscopy
- Mask Inspection
- Particle Sizing, Characterization
- Holography
- Laser Doppler Velocimetry
- Non-Intrusive Measurements

- Material Curing, Hardening
- Laser Marking
- Reprographics
- Machine Vision
- Food Quality Control
- Laser Display, Entertainment

# Why Oxxius?

## One Platform for All Colors

One of the few CW Laser manufacturers that can offer both Laser Diodes and DPSS lasers

Outstanding products, patented solid-state laser architecture, experienced team.  
Your OEM source

**The Best Laser Modules at a fair price**



RPMC Lasers, Inc is proud to be the exclusive  
North American Source for Oxxius

Talk to a Product Manager  
or Get a Quote!

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

THANK YOU!