

## FLUENCE LAUNCHES COMPACT FEMTOSECOND LASER – JASPER MICRO

**Warsaw, Poland, January 31<sup>st</sup>** – Fluence is proud to announce the launch of the newest addition to the well-established Jasper range of femtosecond lasers. Jasper Micro is air-cooled and very compact, making it advantageous for integration where space is limited.

Pulse duration is tunable from < 270 femtoseconds to 8 picoseconds making it versatile in challenging applications (optionally tuneable up to 20 picoseconds). Pulse energies can be varied up to 5 µJ at 1 MHz and the output can vary from pulse-on-demand to 20 MHz.

With a form factor of 400 x 320 x 115 mm<sup>3</sup> and utilizing state-of-the-art technology, the Jasper Micro offers a wide range of benefits for various industries including medical, material processing, and micro technology.

“Jasper Micro will finally solve your problems for applications where you need to have a decent energy level, but you do not want to end up with a bulky overkill of average power” says Dariusz Świerad, the Director of Sales and Marketing at Fluence Technology.

### **Surgical and clinical diagnostics**

Jasper Micro is ideal for applications in the field of ophthalmology such as LASIK, PRK and DNA transfection eye surgery. Other medical applications include cancer treatment, tattoo-removal, and non-invasive imaging. The high energy pulses and high repetition rate allow for efficient ablation of tissue, while the short pulse duration reduces the heat affected zone, minimizing thermal damage, making it ideal for surgical procedures and cancer treatments. Jasper Micro excels in exciting fluorescent dyes in biological materials that are sensitive to pulse energy through fine tuning of the pulse duration, energy and repetition rate. This process can be used to image living cells and tissues with high resolution and minimal damage.

### **Material**

### **processing**

The high energy pulses and high repetition rate of Jasper Micro make it ideal for material processing applications such as cutting, drilling and marking. The utilization of ultrashort pulses reduces the heat affected zone, allowing for increased productivity and precision in manufacturing industry. For glass marking and processing, high-energy femtosecond laser pulses from Jasper Micro are ideal because they break the bonds inside glass, creating a precise cut or mark without generating heat that can cause thermal stress or cracking of the cut edge. In PCB and electronics manufacturing and repairs, the ability to process copper with utmost precision enables many new applications in this field.

### **Micro technology**

Jasper Micro is also ideal for applications in micro technology, such as PCB and electronic repairs, photopolymerization, spectroscopy and multi-photon microscopy. The parameters available from Jasper Micro are well suited to the precise ablation and laser-material interaction of delicate materials and the compact size makes integration easier.

For more information on Fluence's femtosecond laser technology, please visit <https://fluence.technology/>



## About Fluence

Founded in 2016, Fluence Sp. z o.o. is a manufacturer of femtosecond laser solutions with unique all-fiber technology. The company offers robust and stable industrial-grade femtosecond lasers that are immune to misalignment and feature a novel all-fiber oscillator for a robust, reliable package. Fluence is devoted to providing the highest quality standards and product reliability, offering a product lifetime that extends well over the warranty period.

## Contact

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