Product release note 5th October 2020

Jasper Flex

Fluence is excited to introduce its new femtosecond laser product, the Jasper Flex. With power up to 30W, the innovative Jasper Flex is intended for systems with volume constraints that require high laser power and outstanding pulse quality. The Jasper Flex is a smaller version of the Jasper laser, which was the first all-fiber high-power laser built using SESAM-free technology. This ground-breaking model provides unprecedented reliability and an excellent lifespan for users.

Jasper Flex leverages the original Jasper’s novel approach in the field of ultrafast lasers. Arguably the most important part of the laser, the femtosecond oscillator serves as the heart of every system. Applying Fluence’s unique technology, the Jasper Flex’s all-fiber, SESAM-free oscillator has been tested to operate at 40g vibration and in a vast range of temperatures (spanning more than 50 deg C). The oscillator, together with a fiber preamplifier, creates a monolithic construction immune to misalignment. This approach defines the robustness of the Jasper Flex system.

Jasper Flex, together with optional harmonic modules (SHG, THG, FHG), is a versatile tool that is especially useful in applications such as display repairs and micromachining. It is more than just a femtosecond laser as it offers broad pulse duration option tuning from <250 fs up to 20 ps. In addition, Jasper Flex comes with a burst option included as standard. This delivers a nanosecond long burst of individual femtosecond pulses. Together, these features enhance processing speeds, thus enabling users’ applications to run more efficient than ever before.

A close up of electronics

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