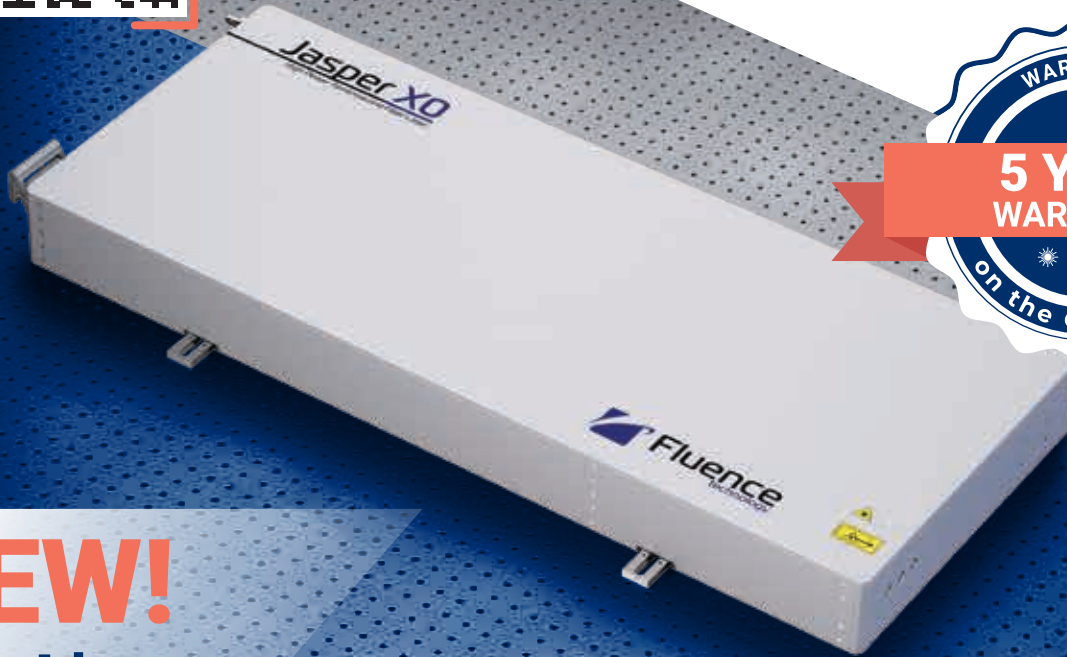




[L*]ProCareLight
Light, Laser and Safety Solutions

Fluence
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NEW!

300 μ J burst

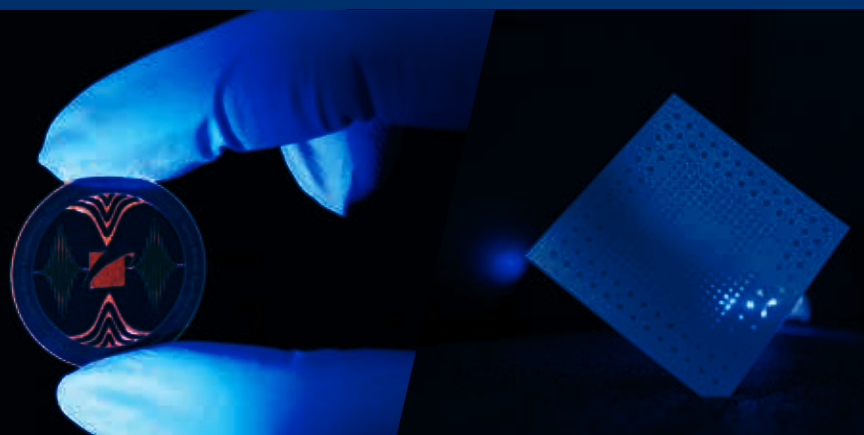
Jasper X0

High Power Femtosecond Fiber Laser

Femtosecond fiber lasers superior lifetime & performance

Jasper X0 is a 1030 nm high-power femtosecond laser, delivering pulses with energy up to 200 μ J and 60 W of average power.

With a truly monolithic all-fiber amplified oscillator inside this laser provides fast warm-up time. Furthermore, you can count on unprecedented long-term stability and hands-free operation. The heart of the system is our unique truly all-fiber oscillator. Thanks to its unique construction and SESAM-free technology Jasper is amazingly robust and reliable. Additionally, the fiber amplifiers ensure unbeatable beam pointing stability even in a harsh environment – unlike the free-space constructions.



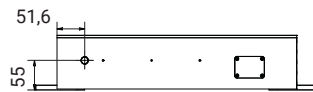
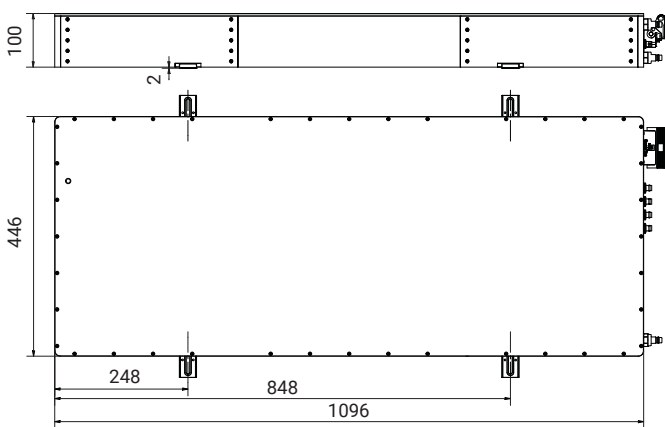
Technical specification:

	Jasper X0-10	Jasper X0-20	Jasper X0-30	Jasper X0-60
Maximum average power	10 W	20 W	30 W	60 W
Maximum pulse energy	50 μ J	100 μ J	200 μ J	200 μ J
... at repetition rate up to	200 kHz	200 kHz	150 kHz	300 kHz
Maximum burst energy	100 μ J	200 μ J	300 μ J	200 μ J
Base repetition rate	20 \pm 2 MHz	20 \pm 2 MHz	20 \pm 2 MHz	20 \pm 2 MHz
Repetition rate tuning	Internal	200 kHz - 20 MHz	150 kHz - 20 MHz	300 kHz - 20 MHz
	Pulse picker	Single Pulse - 2 MHz	Single Pulse - 2 MHz	Single Pulse - 2 MHz
Pulse duration	< 270 fs FWHM (< 250 fs typical)			
Pulse duration tuning	< 270 fs - 8 ps (< 270 fs - 20 ps optional)			
Central wavelength	1030 \pm 5 nm			
Optional wavelength outputs	With Harmonic Generation Module (HGM): 515 nm, 343 nm, 258 nm (available upon request)			
Built-in pulse picker	Pulse on demand, any division of the base repetition rate			
Beam quality M ²	< 1.2 (< 1.1 typical)			
Output beam diameter 1/e ²	2.5 \pm 0.5 mm (other available upon request)			
Polarization	Linear, vertical			
Burst mode for process enhancement	Included			
External gating trigger	Included			
Laser control software	Included			

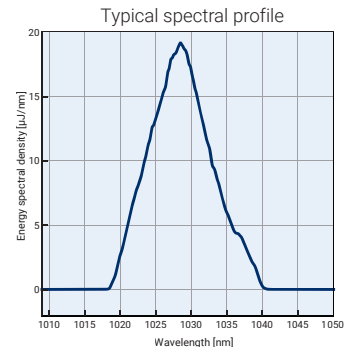
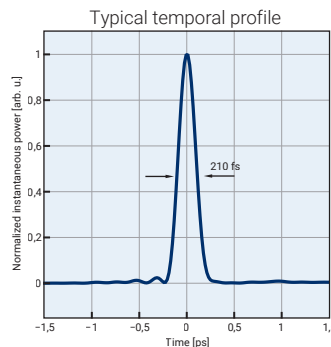
Not exactly what you are looking for?
Get in touch with us and let us help you out.

Physical specification:

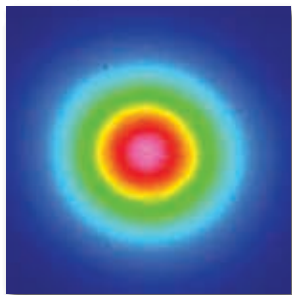
Size	1096 (L) x 446 (W) x 100 (H) mm ³
Power supply unit size	3U 19" rack unit: 485 (W) x 376 (D) x 133 (H) mm ³
Electrical	100 - 240 V AC, 50 - 60 Hz, < 620 W
Operating temperature	15 - 35°C
Operating humidity	Non-condensing
Chiller	Water chiller required (available upon request)



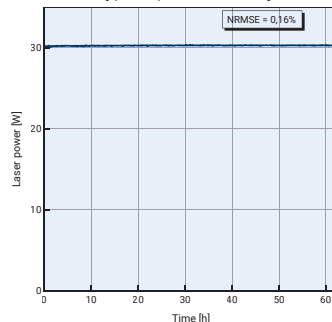
All dimensions in mm



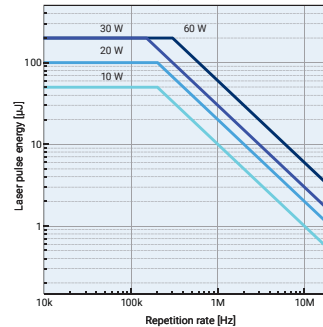
Typical beam profile



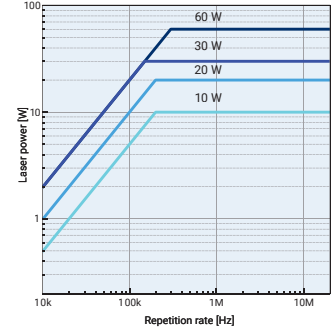
Typical power stability



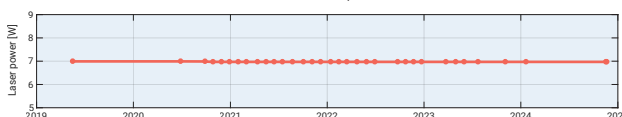
Pulse energy vs. repetition rate



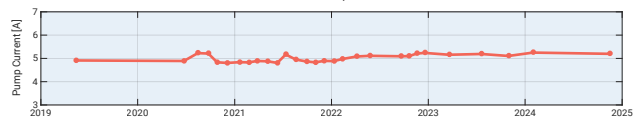
Laser power vs. repetition rate



Years of stable operation



Years of stable operation



All specifications are subject to change without prior notice due to continuous improvements.