

**NEW!**

**300  $\mu$ J burst**

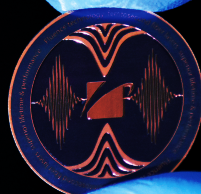
# Jasper X0

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  $\mu$ 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.



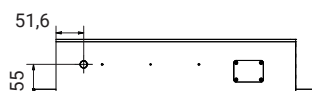
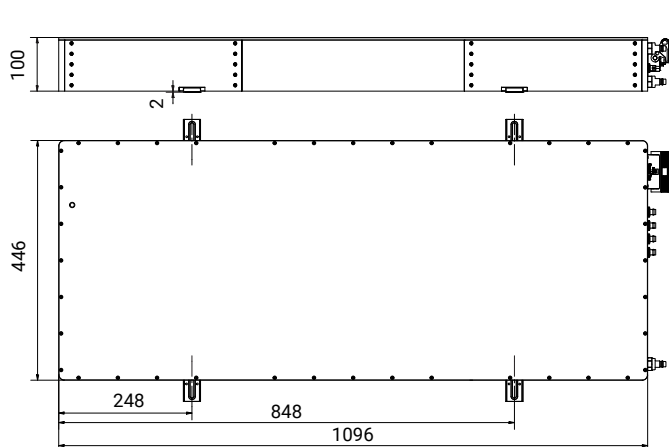
### Technical specification:

	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 $\mu$ J	100 $\mu$ J	200 $\mu$ J	200 $\mu$ J
... at repetition rate up to	200 kHz	200 kHz	150 kHz	300 kHz
Maximum burst energy	100 $\mu$ J	200 $\mu$ J	300 $\mu$ J	200 $\mu$ 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 Pulse picker Single Pulse - 2 MHz	200 kHz - 20 MHz Single Pulse - 2 MHz	150 kHz - 20 MHz Single Pulse - 2 MHz	300 kHz - 20 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 <sup>2</sup>	< 1.2 (<1.1 typical)			
Output beam diameter 1/e <sup>2</sup>	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			

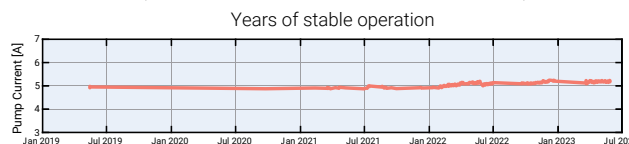
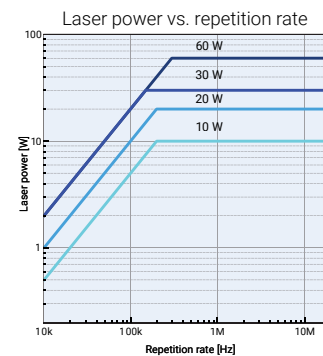
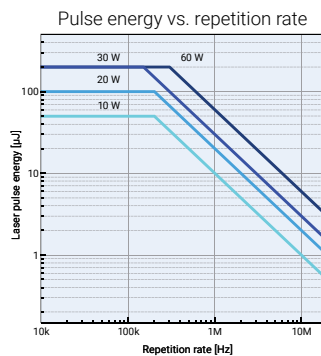
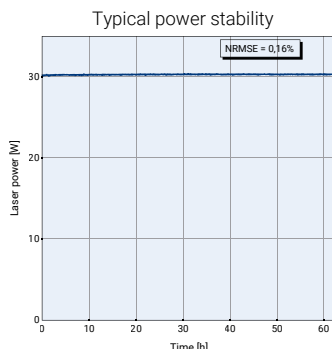
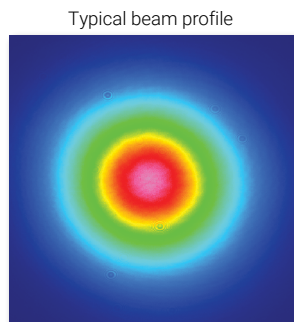
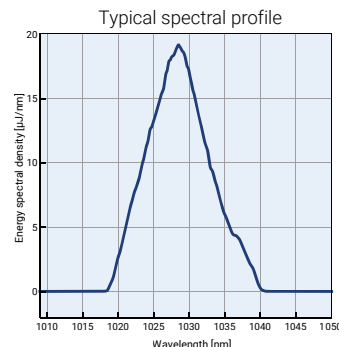
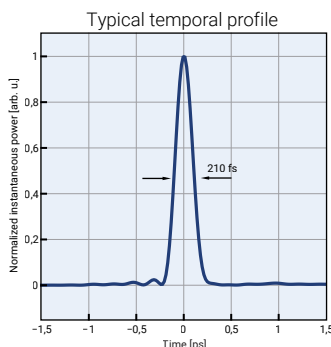
**Not exactly what you are looking for?**  
**Get in touch with us and let us help you out.**

### Physical specification:

Size	1096 (L) x 446 (W) x 100 (H) mm <sup>3</sup>
Power supply unit size	3U 19" rack unit: 485 (W) x 376 (D) x 133 (H) mm <sup>3</sup>
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



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