

**5 YEAR WARRANTY**

**NEW!**

**200  $\mu$ J laser**

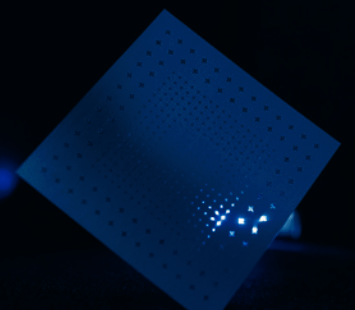
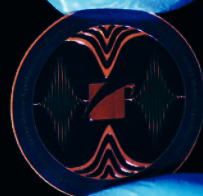
# Jasper X0

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.



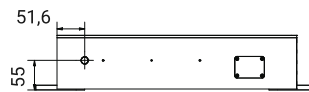
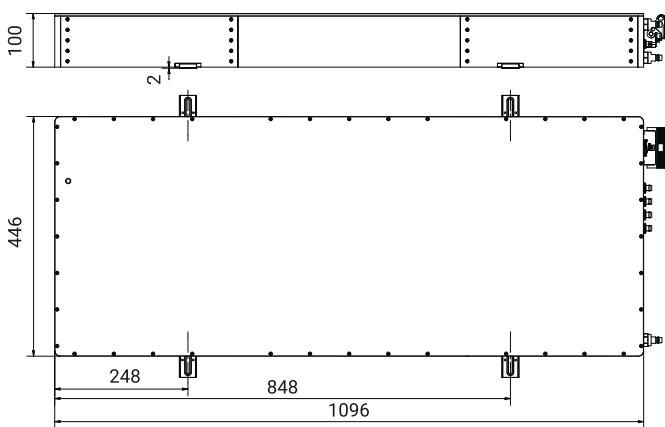
### Technical specification:

	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
System base repetition rate	20 $\pm$ 2.5 MHz			
Two stage repetition rate tuning selectable with control software	200 kHz - 20 MHz, internal repetition rate Single Pulse - 2 MHz, realized with built-in pulse picker			
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			
Built-in pulse picker	Pulse on demand, any division of the base repetition rate			
Beam quality M <sup>2</sup>	< 1.3 (< 1.15 typical)			
Polarization	Linear, vertical			
Burst mode for process enhancement	Included			
External gating trigger	Included			
Laser control software	Included			

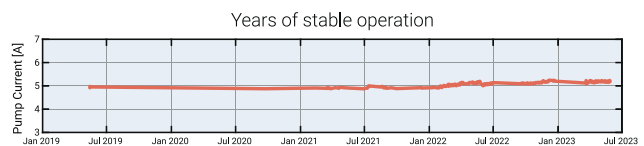
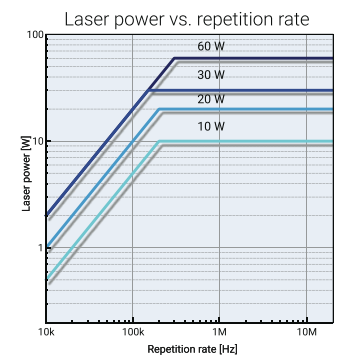
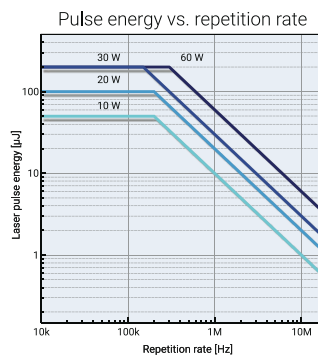
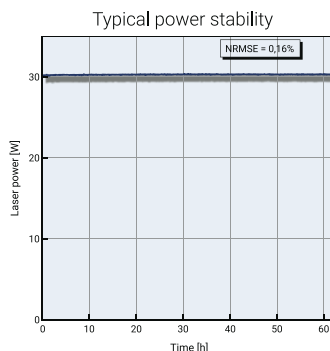
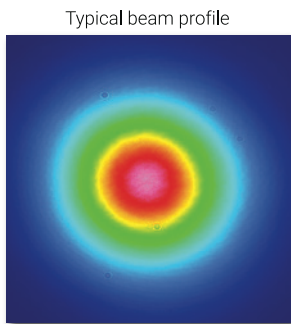
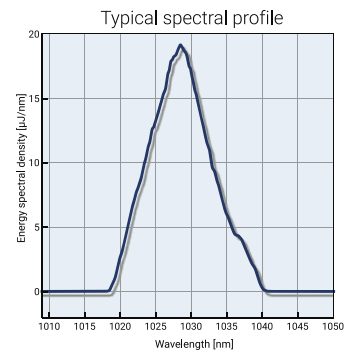
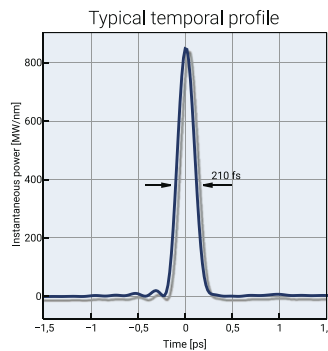
**Not exactly what you are looking for?  
Get in touch with us and let us help you out.**

### 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 size	6U 19" rack unit: 485 (W) x 653 (D) x 267 (H) mm <sup>3</sup>



All dimensions in mm



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