



# Ultrafast lasers that simply work

FOR INDUSTRY, SCIENCE AND MEDICINE

## Jasper X0

High Power Femtosecond Fiber Laser



Jasper is a 1030 nm high-power femtosecond fiber laser, delivering pulses with energy up to 100  $\mu$ J and 60 W of average power. With truly monolithic all-fiber front-end this laser provides fast warm-up time, unprecedented long-term stability and hands-free operation. Contrary to free space laser amplifiers, fiber amplifiers ensure unbeatable beam pointing stability even in harsh environment.

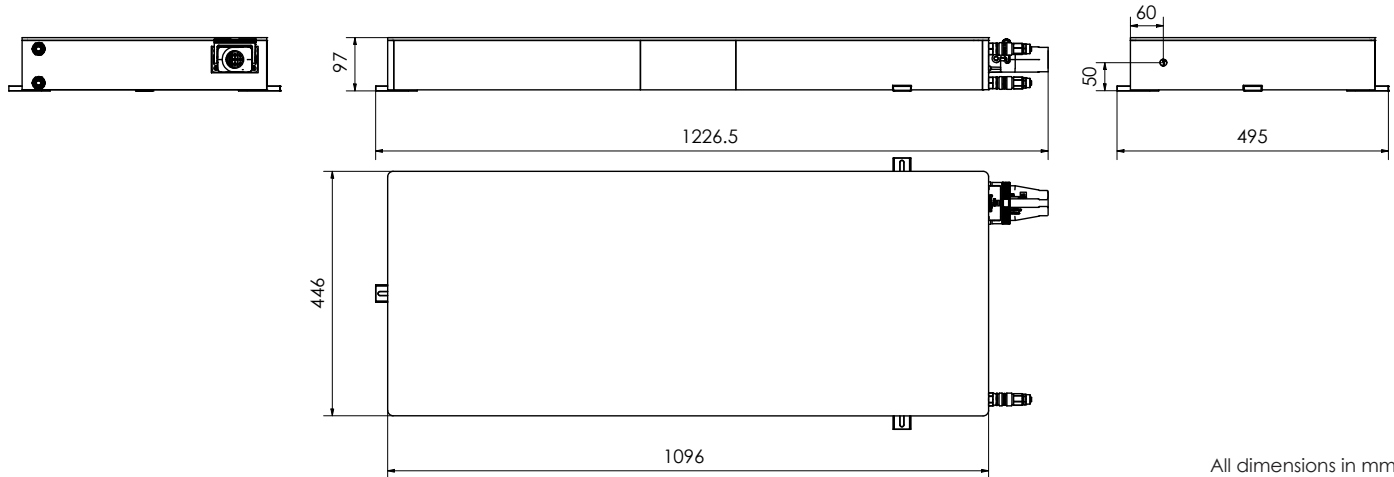
Technical specification:

	Jasper 10	Jasper 20	Jasper 30	Jasper 60
Maximum average power	> 10 W	> 20 W	> 30 W	> 60 W
Maximum pulse energy	> 50 µJ	> 100 µJ	> 100 µJ	> 100 µJ
Two stage repetition rate tuning:	selectable with control software			
Internal repetition rate	200 kHz – 20 MHz		300 kHz – 20 MHz	600 kHz – 20 MHz
Pulse picker	0 Hz – 1 MHz			
System base repetition rate	20 ± 2 MHz			
Pulse duration	< 250 fs (FWHM)			
Pulse duration tuning	< 250 fs – 8 ps (optional 250 fs – 20 ps)			
Central wavelength	1030 ± 5 nm			
Optional wavelength outputs	515 nm, 343 nm, 258 nm			
Built-in pulse picker	Pulse on demand, any division of the base repetition rate			
Beam quality (M²)	< 1.3 (typical <1.2)			
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 97 (H) mm³
Power supply unit size	3U 19" rack unit: 485 (W) x 376 (D) x 132 (H) mm³
Electrical	100 – 240 V AC, 50 - 60 Hz, < 250 W
Operating temperature	15 – 35 °C
Operating humidity	Non-condensing
Chiller size	6U 19" (ask for other options)
Chiller electrical	100 – 240 V AC, 50 – 60 Hz, < 10.0 A



All dimensions in mm

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