



# Jasper Flex

Compact High Power Femtosecond Fiber Laser

## Femtosecond fiber lasers superior lifetime & performance

Jasper Flex – our high-power femtosecond laser for microprocessing. Its compact size makes it easy to use and to integrate. It delivers pulses with a maximum energy of 30  $\mu\text{J}$ , up to 1 MHz repetition rate and as much as 100  $\mu\text{J}$  in the burst mode. The user-configurable burst mode brings new capabilities in industries manufacturing consumer electronics, integrated photonics, and displays. Contrary to free-space lasers, our all-fiber, SESAM-free technology ensures unbeatable beam pointing stability resulting in an outstanding lifetime even in a harsh environment.



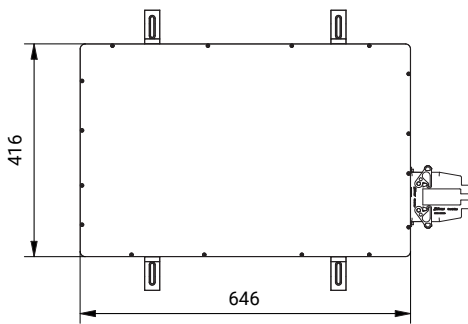
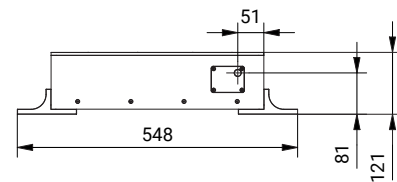
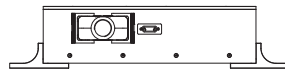
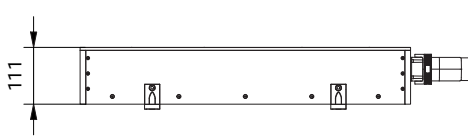
### Technical specification:

Maximum average power	30 W (ask for higher)
Maximum pulse energy	30 $\mu$ J up to 1 MHz (ask for higher)
Maximum burst energy	100 $\mu$ J @ 200 kHz, 1030 nm
Base repetition rate	20 $\pm$ 2 MHz
Two stage repetition rate tuning, selectable with control software	1 - 20 MHz, internal repetition rate Single Pulse - 1 MHz, realized with built-in pulse picker.
Pulse duration	< 270 fs FWHM (< 250 fs typical)
Pulse duration tuning	< 270 fs - 8 ps, software-controlled (< 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)
Polarization	Linear, vertical
Beam quality $M^2$	< 1.3 (< 1.15 typical)
Output beam waist diameter $1/e^2$	2.0 $\pm$ 0.5 mm (ask for other)
Burst mode for process enhancement	Included
6U, 19" rack-mountable chiller	Included
External gating trigger	Included
External analog power modulation	Included
Laser control software	Included
Pulse on demand	Included

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

### Physical specification:

Size	646 (L) x 416 (W) x 111 (H) mm <sup>3</sup>
Power supply unit size	3U rack: 485 (W) x 496 (D) x 133 (H) mm <sup>3</sup>
Electrical	100 - 240 V AC, 50 - 60 Hz, < 300 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

