

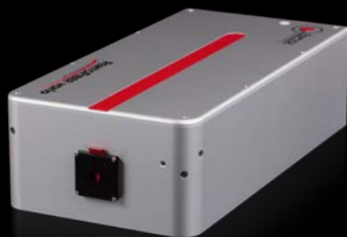
variable.

Flexible, turn-key, and tailored for microstructuring



1030 nm

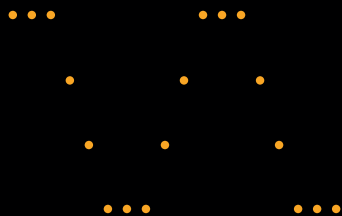
Femtosecond Fiber Laser



Advanced Pulse Control – „real“ Pulse on Demand

- Variable pulse steps, quasi-continuously adjustable
- Smallest increment 12.5 ns
- Ideally suited for optical laser scanning

Without advanced pulse control



With advanced pulse control



Convince yourself and
apply for your own free
live demo!



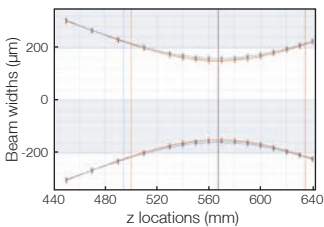
FemtoFiber vario 1030



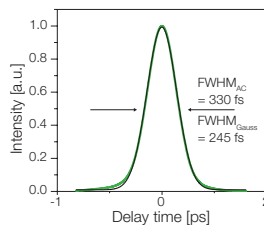
Class 4 Laser Product EN 60825-1:2014.
Visible or invisible laser radiation. Avoid direct exposure to beam. WARNING — Class 4: DANGER — visible or invisible laser radiation when open. Avoid exposure to the beam.

Specifications*	
Center wavelength	1030 nm
Pulse energy	> 2 μJ (@ 1 MHz)
Pulse duration	< 300 (typ. 250) fs
Repetition rate	<10 MHz (< 40 MHz optional) down to single pulse-on-demand
Polarization	> 95 %, linear, vertical
Beam properties (1/e ²)	\varnothing 2.3 mm (typ.)
Beam quality	TEM ₀₀ , M ² < 1.2
Output	Free-space
Power stability	< 1% RMS over 12 h interval (<10 Hz)
Pointing stability	< 50 μrad (1 h)
Pulse-to-pulse stability	< 1% RIN (10 Hz – 1 MHz)
Power supply	24 V DC, < 300 W (optional AC power supply)
Dimensions laser head (H x W x D)	105 x 189 x 380 mm ³
Dimensions control unit	131 x 484 x 600 mm ³ (19" rack, 3 units high)
Operating temperature range	16 - 35 °C
Weight laser head	< 10 kg
Weight control unit	< 20 kg
Umbilical cables	> 2 m long, detachable
Interfaces	USB, Ethernet

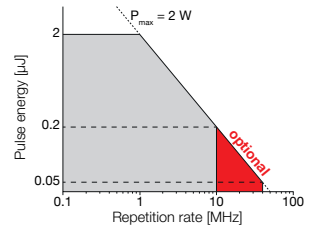
*) Subject to change without notice



Measured caustic and fit.



Autocorrelation signal (black) and Gaussian fit (green curve).



Accessible pulse energy as function of repetition rate.