

variable.

Compact, turn-key, and optimized for 2-photon microscopy

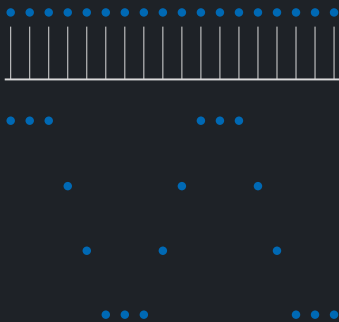
1030 nm Femtosecond Fiber Laser



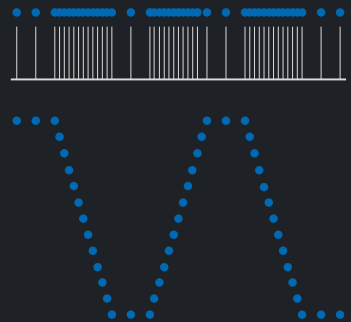
Advanced Pulse Control – „real“ Pulse on Demand

- 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



learn more...



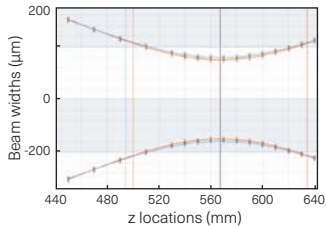
FemtoFiber vario 1030



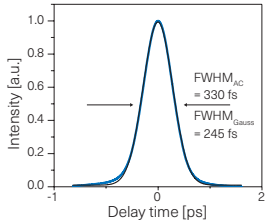
DANGER – VISIBLE AND INVISIBLE LASER RADIATION, AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION, CLASS 4 LASER PRODUCT, EN60825-1:2014

| Specifications* | |
|-------------------------------------|---|
| Center wavelength | 1030 nm |
| Pulse energy | > 2 μ J (@ 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 μ rad (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 |

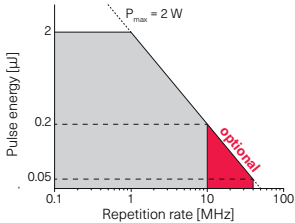
*) Subject to change without notice



Measured caustic and fit.



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



Accessible pulse energy as function of repetition rate.