

reliable.

High-power ultrafast fiber lasers

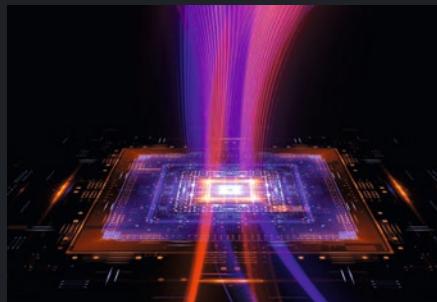
780 nm

Femtosecond Fiber Laser



- Powering the fastest 2-Photon Lithography on the market
- Super-compact cold laser head
- Full software controllable system
- Optional internal AOM

Large installed OEM base with global service!



learn more...



TOPTICA

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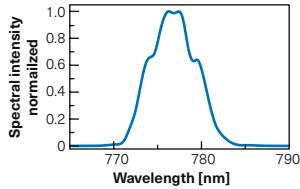
FemtoFiber ultra 780



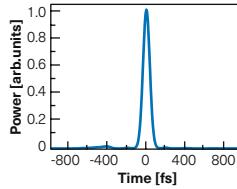
DANGER – VISIBLE AND INVISIBLE LASER RADIATION, AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION, CLASS 4 LASER PRODUCT, EN60825-1:2014

Laser Specifications*	SP (Short-pulse)	Standard	HP (High-power)
Center wavelength		780 nm	
Pulse duration	< 100 fs	< 150 fs	< 170 fs
Average output power [w. AOM, optional]	> 1000 [800] mW	> 1000 [1000] mW	> 1500 [1200] mW
Repetition rate		80 MHz	
Motorized dispersion precompensation (GDD)		-30,000 .. 0 fs ²	
Beam shape	TEM ₀₀ M ² < 1.3	TEM ₀₀ M ² < 1.2	
Linear polarization		> 100:1, vertical	
Output coupling		Free space	
Dimensions laser head		77 x 165 x 300 mm ³ (H x W x D)	
Weight laser head		< 5 kg	
Dimensions supply unit		131 x 484 x 600 mm ³	
Weight supply unit		< 20 kg	
Power supply		24 V DC (AC power supply included)	
Power consumption		< 150 W	
PC Interface		Ethernet, USB	
Environment temperature		19 - 25 °C (operating), 0 - 40 °C (storage and transport)	
Environment humidity		Non-condensing	

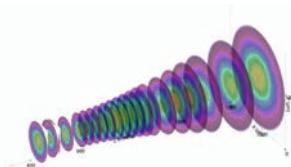
* Subject to change without notice



Typical emission spectrum (linear)



Retrieved pulse shape



M² beam propagation with < 1.1 for both X/Y axis and symmetrical shape