

# reliable.

High-power ultrafast fiber lasers

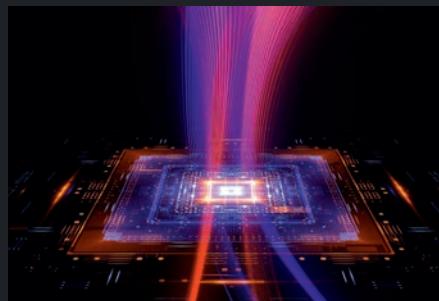
## 780 nm

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**

[www.toptica.com/reliable](http://www.toptica.com/reliable)

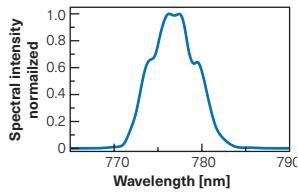
# FemtoFiber ultra 780



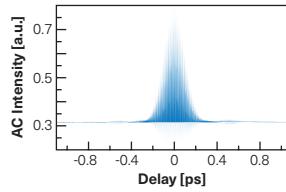
DANGER – VISIBLE AND INVISIBLE LASER RADIATION, AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION, CLASS 4 LASER PRODUCT, EN60825-1:2014

Laser Specifications*	ultra 780 Short-pulse version	ultra 780 Standard version	ultra 780 High-power version		
Center wavelength	780 nm				
Pulse duration	< 100 fs	< 150 fs	< 150 fs		
Average output power [w. AOM, optional]	> 1000 mW	> 1000 mW	> 1500 mW		
Repetition rate	80 MHz				
Motorized dispersion precompensation (GDD)	-30,000 .. 0 fs <sup>2</sup>				
Beam shape	TEM <sub>00</sub> , M <sup>2</sup> < 1.3	TEM <sub>00</sub> , M <sup>2</sup> < 1.2			
Linear polarization	> 100:1, vertical				
Output coupling	Free space				
Dimensions laser head	77 x 165 x 300 mm <sup>3</sup> (H x W x D)				
Weight laser head	< 5 kg				
Dimensions supply unit	131 x 484 x 600 mm <sup>3</sup>				
Weight supply unit	< 20 kg				
Power supply	24 V DC (AC power supply optionally 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				

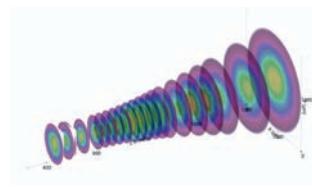
\*) Subject to change without notice



Typical emission spectrum (linear).



Interferometric autocorrelation.



M<sup>2</sup> beam propagation with < 1.1 for both X/Y axis and symmetrical shape