

A new generation of ultrafast lasers

# Tangerine

High power, high energy ultrafast fiber laser

*Tangerine offers the highest pulse energy available today from a fiber laser. Thanks to groundbreaking patented technological advances in fiber design and amplifier technology, Amplitude offers ultrafast fiber lasers with high average power, as well as high output energy. With more than 250  $\mu\text{J}$  of pulse energy, 50 W of average power and state-of-the-art sub-150 fs, Tangerine is the perfect system for research and industrial applications.*



- # 1 Industrial design-grade, designed for 24/7 operation
- # 2 High energy and high average power
- # 3 Short pulses option
- # 4 Frequency conversion from Soft X-ray to THz



# Laser specifications

	TANGERINE	TANGERINE HP	TANGERINE HP <sup>2</sup>	TANGERINE SP
 Average power	> 20 W	> 35 W	> 50 W	up to 50 W
 Pulse energy	> 100 μJ	> 200 μJ	> 250 μJ	up to 200 μJ
 Pulse duration	from 350 fs to 10 ps	from 350 fs to 10 ps	from 350 fs to 10 ps	< 150 fs
 Repetition rate	Single shot to 40 MHz			
 Wavelength	1030 nm			
 Beam quality	$M^2 < 1.3$			
 Spatial mode	TEM <sub>00</sub>			
 Dimensions	125 cm x 42 cm x 16 cm			



## Applications



Ultrafast Science



Microelectronics



Medical Device  
Manufacturing



MicroMachining



Particle Acceleration