

For every industrial need

Tangor

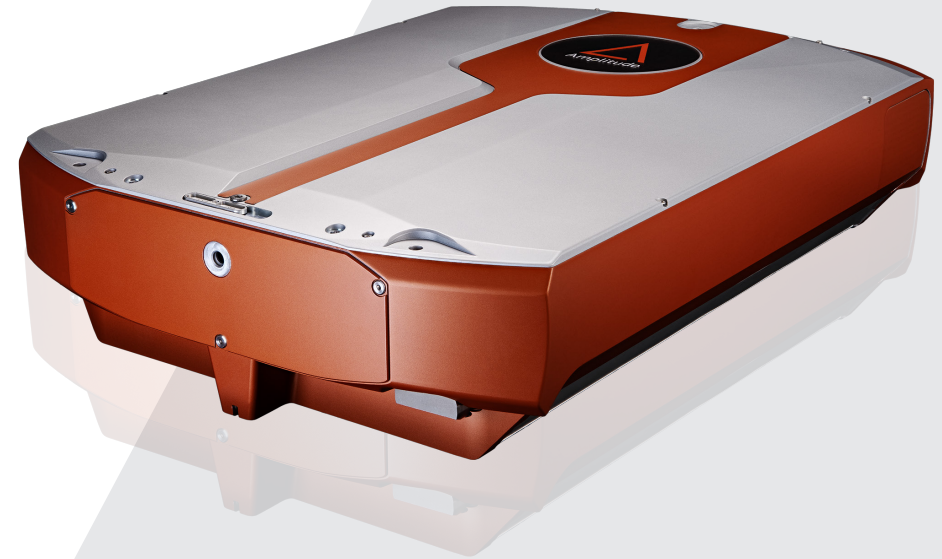
Powerful, full-featured and versatile femtosecond laser

Tangor is a powerful femtosecond laser combining both high repetition rate (going up to 40 MHz and adjustable according to your needs) and high energy per pulse (going up to 1 mJ that can be splitted in several beams according to your production need).

Versatile and full-featured, Tangor femtosecond laser is equipped with: the customization function FemtoBurst™ (choose the number of pulses, their rhythms, time between each pulse between 25 to 100 ns, etc.), the trigger on demand for selecting individual pulses, SuperSync Control for getting more precise synchronization with a high speed scanning system. Tangor femtosecond laser is available with UV output going up to 100W.

Tangor femtosecond laser is the ideal solution for both developing your production process and mass producing on several applications. Versatility combined with high energy make the laser a cost-effective investment.

Tangor is part of Amplitude's femtosecond lasers range, internationally recognized as reliable and stable. Their very short pulsewidths lead to both the lowest heating effect on the market and the best ablation efficiency, reaching an unparalleled quality.



Applications

Industry:

- > Microelectronics
- > Micromachining
- > **Flat Panel Display Cutting**

Medical:

- > Medical Device Manufacturing

Key Features

- > **FemtoBurst™**
- > Trigger on demand - **FemtoTrig™**
- > SuperSync Control
- > Optional green and UV outputs (30 and 100 W)
- > Industrial design for 24/7 operations



Specifications

	Tangor 50	Tangor 100	Tangor 300
Average Power	> 50 W	> 100 W	> 300 W
Energy Per Pulse	> 300 μ J	> 500 μ J	> 1 mJ
Pulse Width	< 500 fs to > 10 ps		
Repetition Rate	From single shot to 40 MHz		
Central Wavelength	1030 +/- 5 nm		
Beam Quality	$M^2 < 1.3$		$M^2 < 1.5$
Beam Circularity	> 87 %		
Beam Pointing Stability	< 25 μ rad/ $^{\circ}$ C		
Long Term Mean Power Stability	< 1 % rms over 100 hours		
Warm-up Time	< 30 min		

Dimensions

Please contact us for Tangor 300.

Tangor 50 / 100	68 x 48 x 16 cm
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Cooling

All Models	Water-cooled
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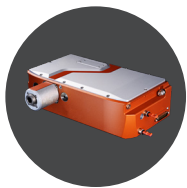
Weight (50 / 100 versions)

Please contact us for Tangor 300.

Laser Heads	75 kg
Power Supply 1	15 kg
Power Supply 2	12 kg

Options

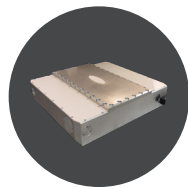
* Suitable for Tangor 300



SHG / THG*



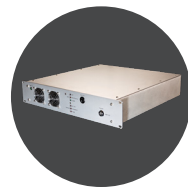
Mango OPA



Non Linear
Compression



GLASS



Synchrolock*