### For every industrial need

# Tangor 100

## Powerful, full-featured and versatile femtosecond laser

Tangor 100 is a powerful femtosecond laser combining both high repetition rate and high energy per pulse (going up to  $\mu$ J).

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 30W.

Tangor 100 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 100 is part of Amplitude's femtosecond lasers range, internationally recognized as reliable and stable. Their very short pulsewidths lead to the lowest heating effect on the market and the best ablation efficiency, reaching an unparalleled quality.





#### **Industry**:

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

#### Medical:

> Medical Device Manufacturing



- > FemtoBurst™
- > Trigger on demand FemtoTrig™
- > SuperSync Control
- > 3 wavelengths available: IR,GR,UV
- > Industrial design for 24/7 operations
- >GhZ compatible



## Specifications

## Tangor 100

	IR	GR	UV
Wavelength	1030 +/- 5 nm	515 +/- 2.5 nm	343 +/- 1.7 nm
Spectral Bandwidth	< 3 nm	< 1 nm	< 0.5 nm
Energy	up to 500 μJ up to 700 μJ	up to 250 μJ	up to 150 μJ
Average Power	100 W	50 W	30 W
Repetition Rate	From single shot to 40 MHz		
Pulse Width	500 fs to 10 ps	500 fs to 5 ps	500 fs to 2 ps
Beam Quality [M²]	< 1.3		
Astigmatism	< 25% (<10% with perfect beam option)		
Circularity	> 87 % (>95% with perfect beam option)		
Beam diameter	3.35 mm	3 mm	5 mm
Power Stability	<1% RMS	< 2%	RMS
Beam Pointing Stability	< 25 μrad/°C		
Warm-up Time	< 30 min		

#### Dimensions

Tangor 100 IR	675 x 525 x 180 mm
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Tangor 100 GR/UV	891 x 525 x 180 mm
Power Supply	600 x 553 x 457 mm

#### Weight

Laser Head	77 kg
Power Supply	55 kg

## Options









Synchrolock\*



Mango

Compress

GLASS

