

Tangor

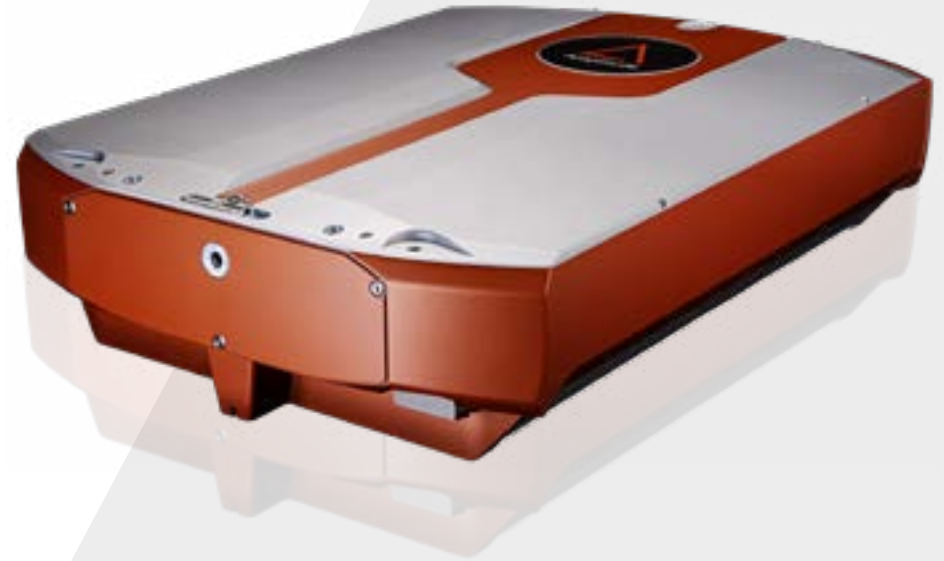
Powerful, full-featured and versatile femtosecond laser

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 pulse widths 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 | 3 mJ |
| Pulse Width | < 500 fs to > 10 ps | | |
| Repetition Rate | From single shot to 40 MHz | | |
| Central Wavelength | 1030 +/- 5 nm | | |
| Beam Quality | $M^2 < 1.3$ | | $M^2 < 1.5$ - typically $M^2 < 1.3$ |
| 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 |
|-----------------|-----------------|

Cooling

| | |
|------------|--------------|
| All Models | Water-cooled |
|------------|--------------|

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



Compress



GLASS



Synchrolock*

