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

Applications > Micromachining > Flat Panel Display

Cutting

Medical:

> Medical Device Manufacturing > FemtoBurst[™]

Key Features

> Trigger on demand - FemtoTrig™

> SuperSync Control

- > 3 wavelengths available: IR,GR,UV
- > Industrial design for 24/7 operations> GhZ compatible



| specifications | | | |
|--------------------------------|--|----------------|----------------|
| | 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 [M ²] | < 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 | | |

Specifications

Tangor 100

Dimensions

| Tangor 100 IR | 675 x 525 x 180 mm |
|------------------|--------------------|
| 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



SHG / THG*



Mango



Compress



GLASS



Synchrolock*





