

For all industrial and scientific needs

Tangor 300

*Accelerate your production process
& advance your research*

Tangor 300 is a powerful femtosecond laser combining high repetition rate, real pulse on demand, high energy, and high beam quality. Coming with a suite of unique features, Tangor 300 enables both new industrial applications such as large area processing, high speed processing, etc., and cutting-edge scientific applications such as high field THz generation, high flux high harmonic generation, and photoemission spectroscopy.

Powerful, versatile and full featured, Tangor 300 femtosecond laser is equipped with:

- > FemtoTrig®: uniquely adapts laser frequency to scan speed by accurately controlling pulse emission (ideal for processing round corners)
- > GHz Burst®: uniquely and substantially increases throughput

IR output > 300 W / GREEN output > 150 W

Tangor 300 femtosecond laser is the ideal solution for enhancing your production process or advance your research projects. It offers high energy ultrashort pulses in the most reliable, compact, versatile, and cost-effective package.



Applications

Industry:

- > High Speed Microcutting and Drilling
- > Flat Panel Display Cutting
- > Large Surface Texturing
- > Microelectronics
- > Micromachining

Science:

- > High Intensity and Energy Physics
- > Lifescience and Imaging
- > Secondary Light Sources
- > Spectroscopy

Key Features

- > Real Pulse on Demand with FemtoTrig®
- > Higher Throughput with GHz Burst®
- > IR and Green Outputs
- > Industrial Design for 24/7 Operations

SPECIFICATIONS

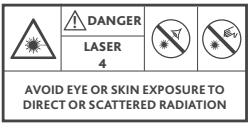
Tangor 300

	IR	GR
Pulse Width (fs)	< 500	500 fs +/-150 fs
Repetition Rate	Single shot to 40 MHz	Single shot to 2 MHz**
Max Power (W)	300	150
Max Energy (µJ)	3000	1500
Reference Repetition Rate	100 kHz	
Central Wavelength	1030 nm +/-5nm	515 nm +/- 3 nm
M ²	<1.35	
Beam Diameter (mm)	5,5mm +/- 1mm	4,5 mm +/- 1mm
Astigmatism	<25%	
Beam roundness	>80%	
Waist assymetry	<13%	
Pointing Stability	< 25µrad/°C	
p to p stability	<1% RMS	<2% RMS
Power stability (100 hrs)	<1% RMS	<2% RMS

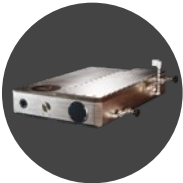
** Higher repetition rate available upon request

Dimensions

Tangor 300 IR & GR	941 x 925 x 287 mm
Power Supply	600 x 553 x 600 mm



Options



Compress



Synclock



Specifications are subject to change without prior notice | © 01-2026 | Ref.: 1589 - E