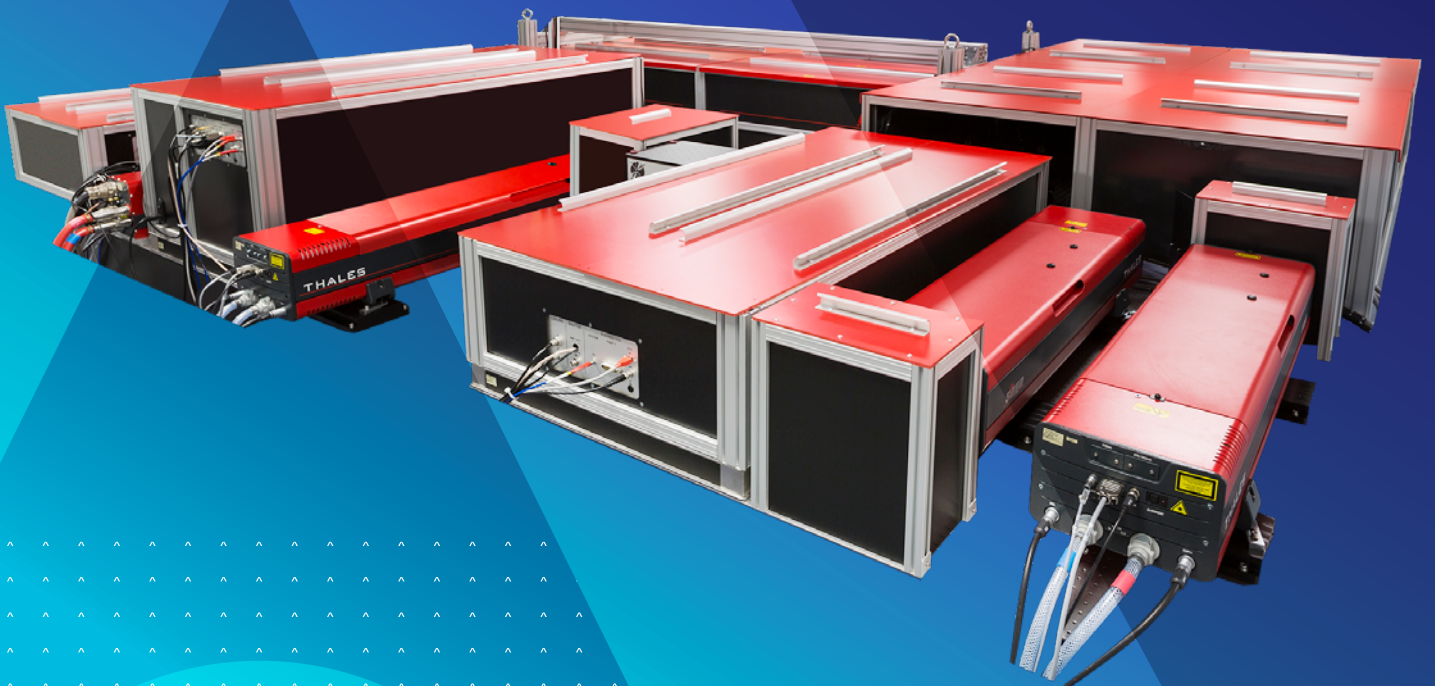


QUARK 200 / 350 / 500 Ultrafast Ti:Sa Laser Series

Pioneer and innovative
in high peak power laser
Reliable, industrial grade
technologies
Smart platform for easy
and effective integration



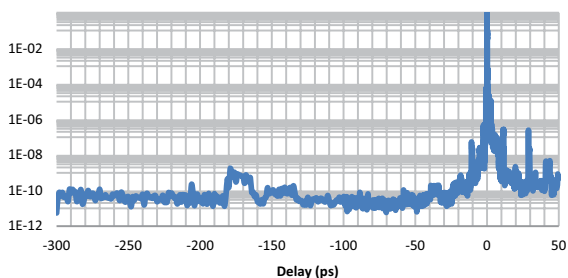
QUARK 200 / 350 / 500

Ultrafast Ti:Sa Laser Series

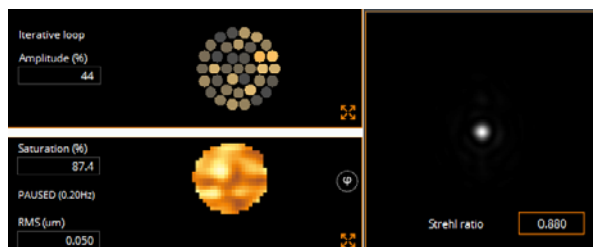
Applications

- Electrons and ions acceleration
- Plasma Physics
- VUV-Xray generation
- High order harmonic generation
- Time resolved spectroscopy

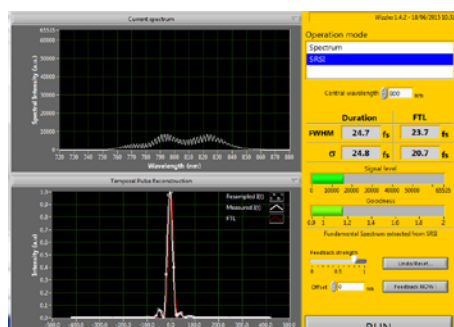
Contrast Measurement with XPW



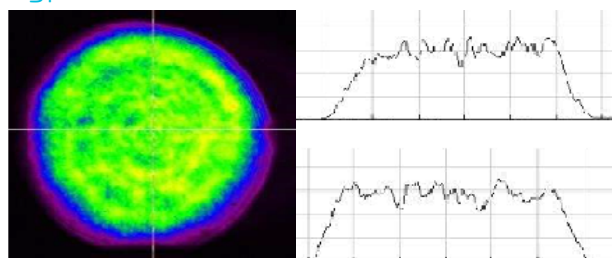
Strehl Ratio ≥ 0.85 and Far Field



Pulse Duration and Repeatability



Typical Beam Profile



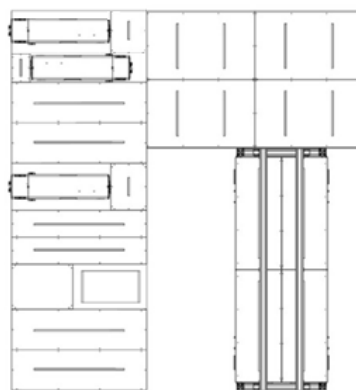
Features and Benefits

- Patented technologies offering state of the art performances along with industrial grade
- Qualified hardware with robust software solution providing highest availability
- User friendly interface designed for daily operation
- Modular platform based on reliable building blocks engineered for evolution

Specifications

Version	QUARK 200	QUARK 350	QUARK 500
Repetition rate (Hz)	1 or 5		1
Peak power (TW)	≥ 200	≥ 350	≥ 500
Central wavelength (nm)	~ 800		
Energy per pulse (J) After compression	≥ 5	≥ 9	≥ 13
Pulse duration FWHM (fs)	Down to 25		
Pulse to pulse energy stability (% rms)	≤ 1		
Contrast ratio obtained with XPW	1 : 10^5 at - 5 ps		
	1 : 10^8 at - 30 ps		
	1 : 10^{10} at - 100 ps		
Strehl ratio	≥ 0.85 (with deformable mirror)		

Physical Characteristics



QUARK 200 layout example without compressor (*)

Table size: 3.9 x 4.2 m² (12.8 x 13.8 ft²)

(*) Other configurations are available on request. Specifications are dependent on the chosen configuration and options

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