

FEATURES

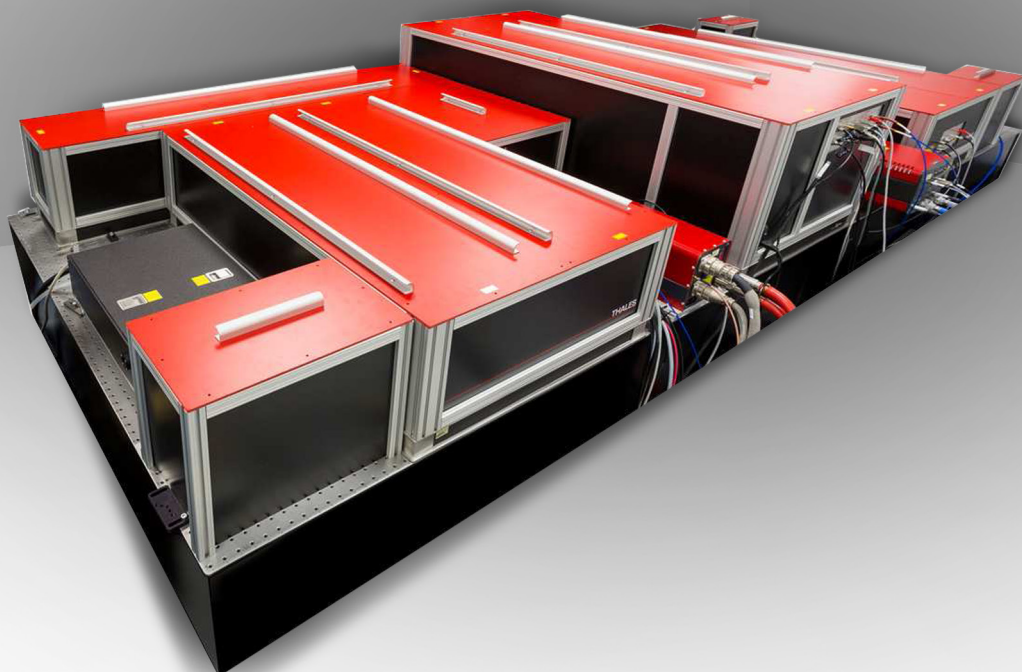
- Industrial grade for a compact footprint
- Unmatched energy stability and beam pointing
- High contrast using XPW filter
- Tango Panorama software
- Option : beam transport to experimental area

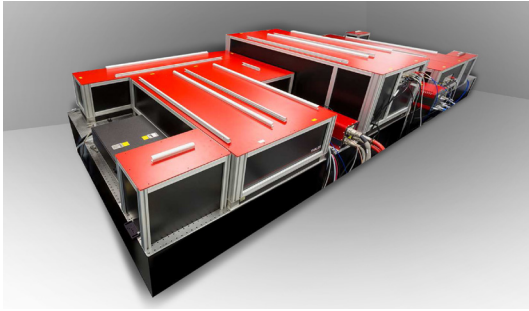
APPLICATIONS

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

QUARK 45

Ultrafast Ti:Sa Laser Series





QUARK 45

Ultrafast Ti:Sa Laser Series

The world reference of compact and reliable 45 TW Ti:Sa laser with proven specifications.

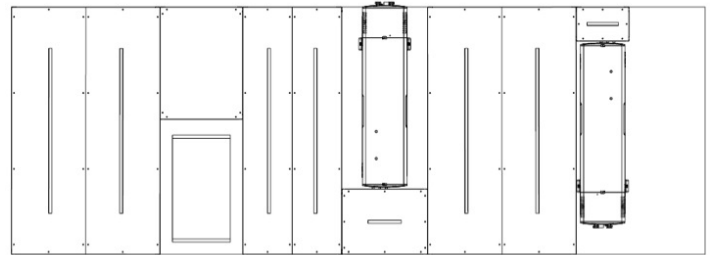
Physical characteristics

QUARK 45 Typical layout

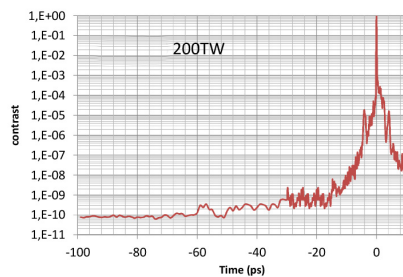
Table size: 1.5 x 4.2 m² (4.9 x 13.8 ft²)

Specifications

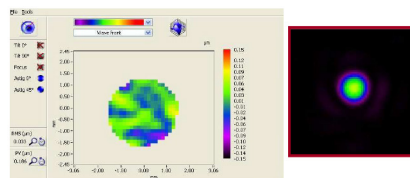
Repetition rate (Hz)	Up to 10
Peak Power (TW)	> 45
Central Wavelength (nm)	~ 800
Energy per pulse (J) After compression	> 1.2
Pulse duration FWHM (fs)	Down to 25
Pulse to pulse energy stability (% rms)	≤ 1
Contrast Ratio (ps) obtained with XPW	1 : 10 ⁵ under 5
	1 : 10 ⁸ under 30
	1 : 10 ¹⁰ under 100
Strehl Ratio	≥ 0.85 (with deformable mirror)



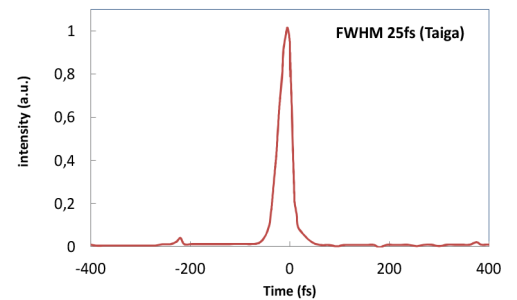
Typical measurements



Contrast measurement with XPW



Strehl ratio > 0.9 and far field



Pulse duration

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