THALES

www.thales-laser.com

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 200

Ultrafast Ti:Sa Laser Series

QUARK 200

Ultrafast Ti:Sa Laser Series

The world reference for 200 TW laser with demonstrated specification and industrial reliability dedicated to laser facilities. Designed with PW level proven technologies. Ready for upgrade to the highest peak power.

Specifications

Repetition rate (Hz)*	Up to 5
Peak Power (TW)	≥ 200
Central Wavelength (nm)	~ 800
Energy per pulse (J) After compression	≥ 5
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)

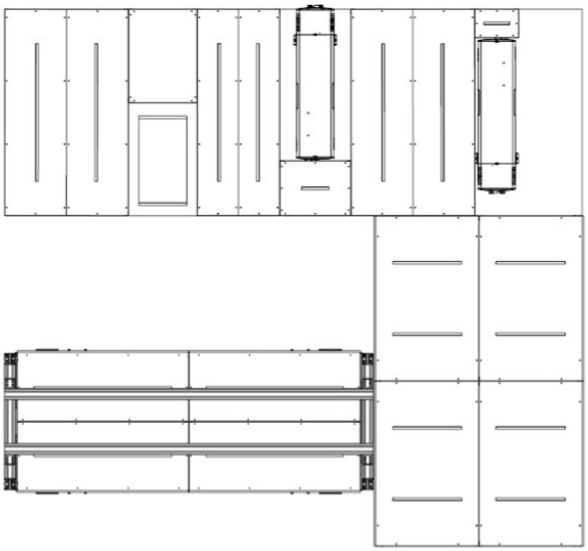
*Custom repetition rate on demand

Physical characteristics

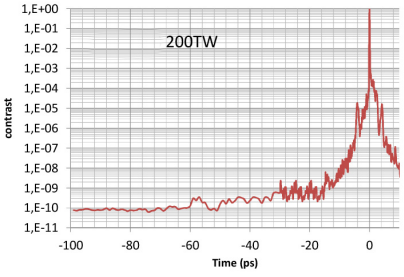
QUARK 200 layout example(*)

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

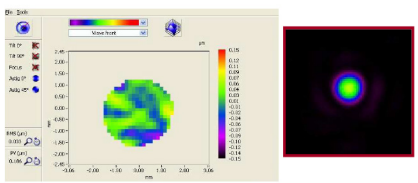
(*) Other configurations are available on request. Specifications are dependent upon the chosen configuration and options



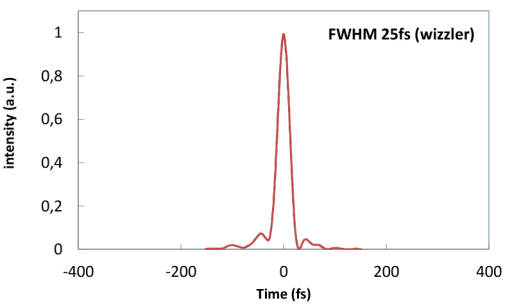
Typical measurements



Contrast measurement with XPW



Strehl ratio > 0.9 and far field



Pulse duration

Europe
Thales Optronique S.A.S.
2, avenue Gay-Lussac – CS 90502
78995 Élancourt Cedex – FRANCE
Tél. : + 33 (0)1 30 96 89 45
Fax : +33 (0)1 30 96 89 59
thales-laser@fr.thalesgroup.com

Japan
Thales Japan K.K.
Akasaka Tameike Tower 8F.,
2-17-7, Akasaka, Minato-ku,
Tokyo 107-0052 - JAPAN
Tel : +81 3 6234 8150
Fax:+81 3 6234 8101

North America
Thales Components Corporation Inc.
40G Commerce Way, PO Box 540
Totowa, New Jersey 07511-0540 USA
Tel.: + 1 (973) 812-9000
Fax: +1 (973) 812-9050