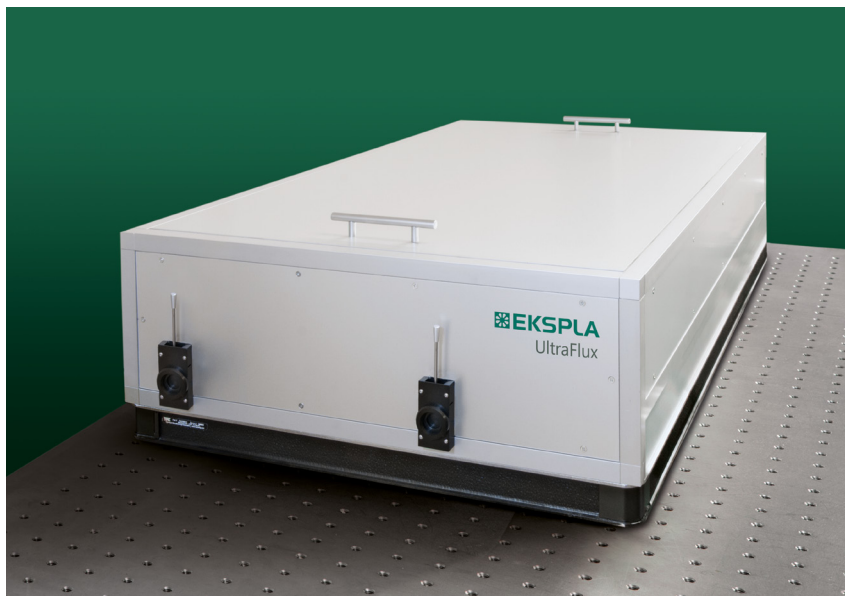


UltraFlux



UltraFlux is the first compact high energy tuneable wavelength femtosecond laser system which incorporates the advantages of ultrafast fiber laser, solid-state and parametric amplification technologies in less than 1 square meter footprint box. Patent pending (application No. EP2924500) OPCPA front end technology uses the same picosecond fiber laser for seeding both picosecond DPSS pump laser and femtosecond parametric amplifier by spectrally broadened output. This approach greatly simplifies the system – excludes femtosecond regenerative amplifier and eliminates the need of pump and seed pulse synchronization. In addition to that, contrast of the output pulses in picosecond to nanosecond time scale is potentially increased.

System generates 30 fs pulses, which can be automatically tuned in 680 – 960 nm wavelength range. Less than 10 fs pulses are obtained in a few-cycle operating regime. Up to 0.35 mJ output pulse energy with better than 1% pulse-to-pulse stability at 1 kHz repetition rate is achieved by using a state of the art OPCPA technology.

By incorporating parametric amplifier technology together with a novel ultrafast fiber laser helped to create and bring to the market a new tool for femtosecond pump-probe, nonlinear spectroscopy, emerging high harmonic generation experiments and other femtosecond and nonlinear spectroscopy applications. With this laser ultrafast science breakthrough is closer to any photonics lab than ever before.

Tunable Wavelength Femtosecond Laser System

FEATURES

- ▶ Based on the novel OPCPA (Optical Parametric Chirped Pulse Amplification) technology – simple and cost-efficient operation
- ▶ Hands free wavelength tuning from 680 to 960 nm
- ▶ 30 fs pulse duration (10 fs is available)
- ▶ 1 kHz repetition rate
- ▶ 0.35 mJ pulse energy
- ▶ Excellent pulse stability: < 1 %
- ▶ Fiber laser based front-end (patent application No. EP2924500)
- ▶ Small footprint
- ▶ Compact picosecond pump laser

APPLICATIONS

- ▶ Femtosecond pump-probe spectroscopy
- ▶ Nonlinear spectroscopy
- ▶ High harmonic generation
- ▶ Your application is welcome

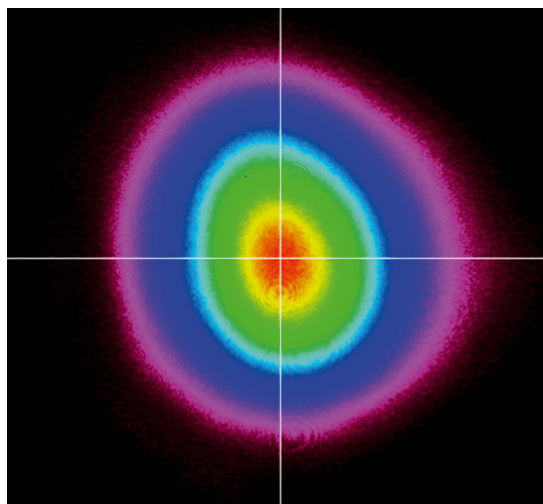
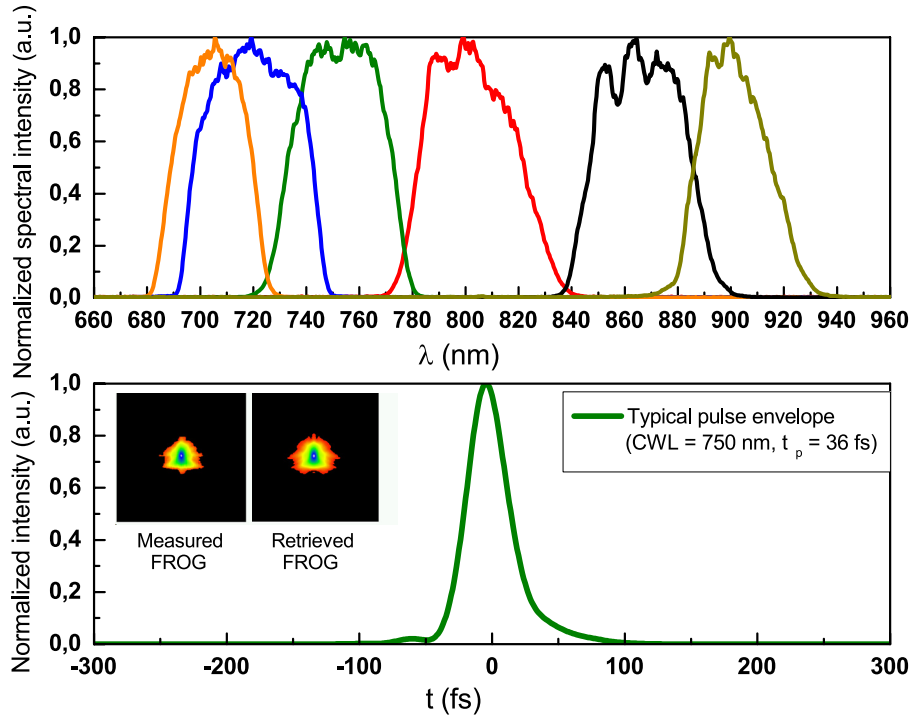
OPTIONS

- ▶ Amplified and compressed supercontinuum output (1 μ J, 10 fs, 680 – 960 nm)
- ▶ CEP stabilization
- ▶ Idler output: 1200 – 2200 nm
- ▶ Second harmonics: 345 – 475 nm
- ▶ Third harmonics: 235 – 315 nm

MAIN SPECIFICATIONS

Model	UltraFlux FT2101
Max. pulse energy	0.35 mJ
Tunability	680 – 960 nm
Pulse duration ¹⁾	30 – 50 fs
Pulse repetition rate	1 kHz
Pulse stability	<1% rms
Footprint	1.2 × 0.75 m

¹⁾ 10 fs is available.



Typical beam profile.
Output pulse energy 0.35 mJ

