FEMTO LASERS
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PRESS RELEASE

FEMTOPOWER™

New members in the multipass amplifier family

New system specifications

Sub-25 fs pulses with
0.5 | 0.8 | 1.6 | 5 mJ

Sub-7 fs pulses with
0.2 | 0.3 | 0.7 mJ

Repetition rate
@ 10 | 5 | 1 kHz

CEP stabilized

FEMTOLASERS Produktions GmbH
is the premiere manufacturer of ultrafast, compact and reliable laser oscillator and amplifier solutions. Founded in 1994 in Vienna, Austria, the company´s products and excellent services have evolved to be the first choice among OEMs and scientists worldwide for demanding applications and solutions. FEMTOLASERS state-of-the-art products offer technology of highest quality.

WE LIVE IN AN ULTRAFST WORLD™
COME JOIN US !

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December 12th, 2008

FEMTOLASERS' successful line of high power ultrafast Ti:Sapphire amplifier systems is now available with extraordinary features in the 3rd generation since its introduction in 1997.

The unmatched combination of the FEMTO-SOURCE™ rainbow™ seed oscillator with the FEMTOPOWER's multipass amplifier scheme guarantees unprecedented stability and inherent lowest CEP noise. The feedback signal for CEP stabilization is derived from our proprietary compact and robust Difference Frequency Generation approach (DFG), utilizing the ultrabroad bandwidth of the FEMTO-SOURCE™ rainbow™.

Using our proprietary sealed vacuum chamber system for the amplifier crystal combined with our proprietary Dispersive Mirror technology for dispersion management, the system generates the shortest, high energy optical pulses commercially available. Featuring unprecedented pulse quality, short-term, long-term and CEP stability and reproducibility, the amplifier system is the optimum light source for attosecond- and intense laser science.
The pulse-background contrast is the highest in commercial amplifier systems where the main pulse contains the entire energy without pre-pulses or pedestals. In combination with the unsurpassed short pulse duration, the highest possible peak power is available for demanding experiments.

Applications include Atto science, High Harmonic Generation incl. x-ray generation, time resolved ultrafast spectroscopy, frontend for TW and PW ultrafast amplifier systems, femtochemistry, coherent THz generation, materials processing, OPA pumping and many others in the demanding scientific environment.