



## FEMTOSOURCE™ **rainbow™**

The **NEW** standard  
for ultrafast oscillators

May 12<sup>th</sup>, 2010

### Multiple parallel output options

**Ultrafast** sub-7 fs pulse duration with 200 mW average power.

**Ultrabroad** 260 nm spectral bandwidth with 200 mW for seeding applications.

**Ultraclean** 2.5 nJ for spectra up to 50 nm in bandwidth for high contrast seeding applications.

**Ultrapower** nearly 1 MW of peak power (500 mW, 7 fs pulses, non-CEP).

**Ultra'red'** 1030 nm, ideal for seeding OPCPA pump lasers.

### 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 offers products and excellent services which 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™**

**join us !**

**NEW generation FEMTOSOURCE™ rainbow™ ultrafast oscillator offering Carrier Envelope Phase (CEP) stabilized few cycle pulses as well as multiple simultaneous outputs.**

**FEMTOSOURCE™ rainbow™** is the flagship of ultrafast Ti:Sapphire oscillators. Building on renowned and unsurpassed qualities, FEMTOLASERS raises the bar once more, by announcing the **NEW rainbow™** ultrafast oscillator generation.

The new extraordinary system offers CEP stabilized pulses with multiple simultaneous output options centered at 800 nm and 1030 nm, with 100% mutual synchronization guaranteed.

The rugged CEP stabilization is based on FEMTOLASERS' unique Difference Frequency Generation approach, which requires neither an interferometer, nor nonlinear broadening of the spectrum. The new, modular design makes an upgrade of a non-CEP stabilized to a CEP stabilized rainbow™ feasible.

FEMTOLASERS proven Dispersive Mirror (DM) technology allows for generation of the cleanest ultrafast laser pulses. Highest possible contrast is achieved by controlling the intra-cavity dispersion over one octave. DM technology warrants rainbow™ oscillators with the lowest possible number of components, directly reflected in the highest passive stability.

The robust mechanical package of the FS rainbow™, together with the integrated BEAMALIGN™ beam pointing stabilization, lead to extreme ultrafast performance with extraordinary reliability and ease of use.