

# Halcyon<sup>™</sup> - Repetition Rate Locked Ultrafast Ti:sapphire oscillator

Tunability and flexibility in customizable configurations to optimize your specific experiment

The **Halcyon<sup>TM</sup>** series is KMLabs' family of repetition-rate locked, tunable ultrashort-pulsed Ti:sapphire-based oscillators. It is a fully engineered and integrated commercial source based on a single rugged opto-mechanical platform. The Halcyon<sup>TM</sup> has the same tunability as the Griffin<sup>TM</sup> series of oscillators with the additional feature of repetition rate locking.

Tailor the laser output to the optimum for your experiment.

#### Halcyon™ Unique Features

0.8

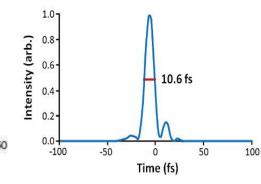
0.6

0.4

Intensity (arb.)

- Low jitter, <150 fs, locking to your RF reference signal\*</li>
- Customer-specified reference frequency: 75 MHz 4 GHz
- Ultrashort sub-12 fs pulses, up to 1.4 W average power
- Easy-to-use, computer-controlled interface

## Halcyon™ Tunability and Pulse Duration



### Contact us for full specifications or with questions

### **Applications**

- Synchrotron locking
- Pumping OPOs
- Materials Research
- Femtochemistry
- Spectroscopy
- THz Generation
- Ultrafast Imaging
- 2-photon polymerization
- Pump-probe experiments

#### **Features**

- Average powers up to >1.4W
- Maximum pulse energy >15 nJ
- Configurable repetition rates from 75-102 MHz
- Repetition rate locking
- Configurable power
- Computer control of the center wavelength and bandwidth of the oscillator spectrum
- Computer controlled pulse duration
- < 12fs standard with < 10fs option
- Excellent beam quality: M<sup>2</sup> typically < 1.2
- One-box configuration with integrated pump laser
- Graphical, intuitive software control with integrated diagnostics
- Custom configurations available



800

Wavelength (nm)