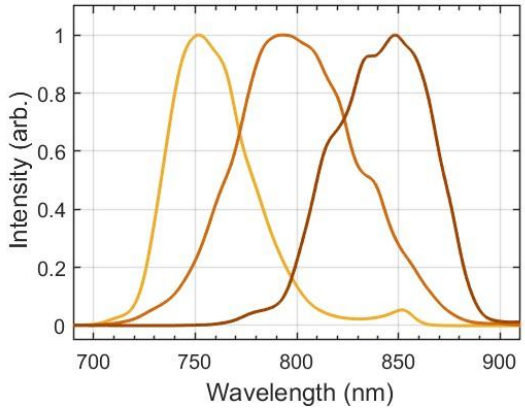
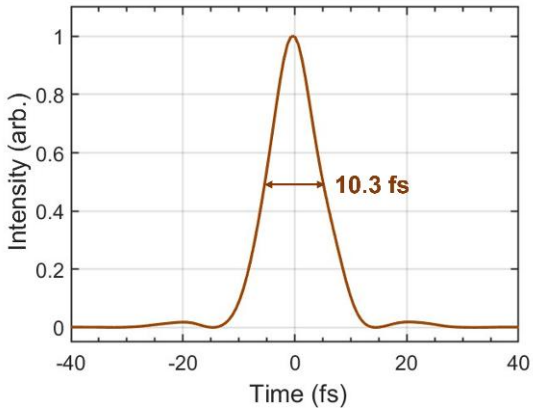
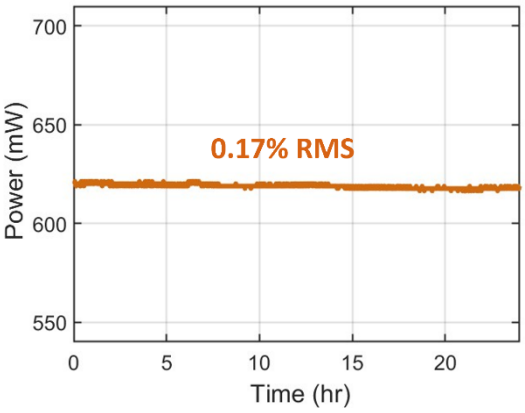
Griffin Prime

KMLabs' **Griffin** Ti:sapphire oscillator

- Wide range wavelength tunability and built on water-cooled base plate for maximum long-term stability







Specifications	
Pump laser	5W, 532 nm CW
	10W, 532 nm CW
Center wavelength	~ 800 nm
Tunable wavelength range	~ 750-850 nm
Repetition rate (selected upon order)	75-100 MHz
Max mode-locked power	>500 mW at 800 nm
	>1000 mW at 800 nm
Min pulse duration	< 15 fs based on Fourier transform limit (~450 mW)
Pulse energy	> 5 nJ
	> 10 nJ
Power Stability	< 0.5 % RMS over 24 hr
Pointing Stability	3 µrad RMS over 24 hr
Beam Diameter	< 1 mm ($1/e^2$)
Beam Divergence near TEM_{00}	< 2 mrad (half angle)
Polarization	Linear, Horizontal
Approx. Dimensions (mm)	710 L, 420 W, 160 H

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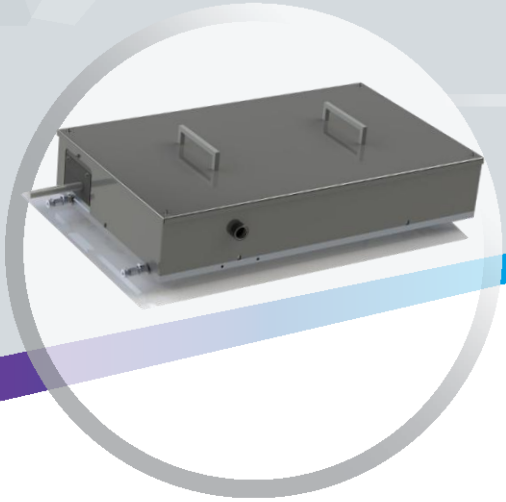


Griffin Prime is a wavelength-tunable ultrafast oscillator coming with a dedicated laptop, easy-to-use software, and integrated diagnostics such as spectrum output and pulse train output.

Griffin is built on a water-cooled breadboard to provide superior power and pointing stability. The small formfactor, one-box configuration, high peak power, and high beam quality make it a good seed laser for ultrafast amplifiers.

Computer control of the center wavelength and pulse duration brings the output customization to a click of a button. Additionally, users can easily access the interior optics via the top lid; KMLabs offers generous remote customer support.

Features

- Laptop to display and control the oscillator spectrum.
- Integrated spectrometer and photodiode pulse train output.
- One box configuration with integrated pump laser.
- Water-cooled base plate for stability.

Options

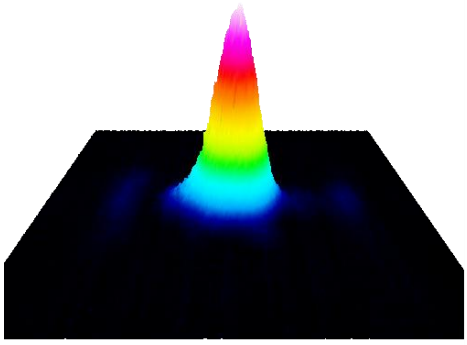
- < 12 fs pulse duration
- Repetition-rate lock (see KMLabs' Halcyon)
- Dual-head ASOPS (see KMLabs' Orthos)

Applications

- OPO pumping
- Amplifier seeding
- Pump-Probe spectroscopy
- THz generation
- Two-photon microscopy

Coming Soon

- Fiber-coupled output
- Low-cost direct diode pumping



Near TEM_{00} beam profile

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