



# Wyvern™-1000 - High Power Ultrafast Amplifier System

Tunable repetition rate ultrafast regenerative Ti:sapphire amplifier, up to 50 kHz

## Applications

- High harmonic generation (HHG)
- Pumping OPAs and HG units
- Materials research
- Femtochemistry
- Spectroscopy
- THz generation
- Ultrafast Imaging
- Pump probe experiments

## Features

- Cryogenic cooling enables highest average powers on the market
- Average power >20W from a single box configuration
- Pulse energies up to 9 mJ
- Repetition rates from 1 to 50 kHz
- Pulse duration of < 40 fs
- Excellent beam quality: M<sup>2</sup> typically 1.1 - 1.2
- Intuitive control software including wavelength, bandwidth, power, and repetition rate control with integrated diagnostics
- One-box configuration with integrated pump lasers and oscillator
- Combination of clean (low pedestal), short pulses and high energies gives higher peak intensities for nonlinear processes
- Custom configurations available



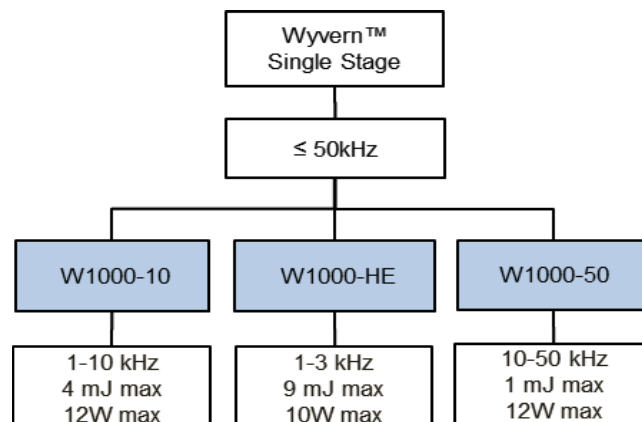
**Wyvern-1000™** is KMLabs' sub-40 fs, single-stage regenerative amplifier. It is a fully engineered and integrated commercial source based on a single rugged opto-mechanical platform. It employs patented (US 6,804,287) cryogenically-cooled amplifier technology, allowing for a continuous trade-off between pulse energy and repetition rate.

Tailor the laser output to the optimum for your experiment.

## Wyvern-1000™ Unique Features

- Optimized for pumping HHG (KMLabs' XUUS™ product)
- Tunable repetition rate: 1-10 kHz or 10-50kHz in a single instrument
- Clean pulses due to cryogenic thermal management
- Sealed, modular stretcher and compressor
- 2nd-generation cryocell with improved reliability and maintainability

## Wyvern-1000™ Product Family



*Contact us for full specifications or with questions*