

# Wyvern<sup>™</sup>-500 - High Power Ultrafast Amplifier System

Tunable repetition rate ultrafast regenerative Ti:sapphire amplifier, up to 300 kHz



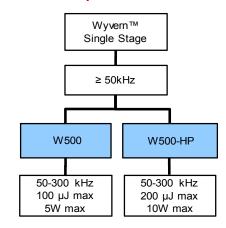
Wyvern-500<sup>™</sup> is KMLabs' high repetition-rate, 50-300kHz single-stage regenerative amplifier. It is a fully engineered and integrated commercial source based on a single rugged opto-mechanical platform. It employs patented (US 6,804,287) cryogenically-cooled amplifier technology, allowing for continuous trade-off between pulse energy and repetition rate.

Tailor the laser output to the optimum for your experiment.

#### Wyvern-500<sup>™</sup> Unique Features

- Highest pulse energy for 100 kHz-class Ti:sapphire systems
- Tunable repetition rate: 50 -300 kHz 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-500<sup>™</sup> Product Family



# Applications

- 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 up to 10W from a single box configuration
- Pulse energies up to 200 μJ
- Repetition rates from 50 to 300 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 nonliear processes
- Custom configurations available



Contact us for full specifications or with questions