

Red Dragon[™] - High Energy Ultrafast Amplifier System

Tunable repetition rate ultrafast multistage, multipass Ti:sapphire amplifier



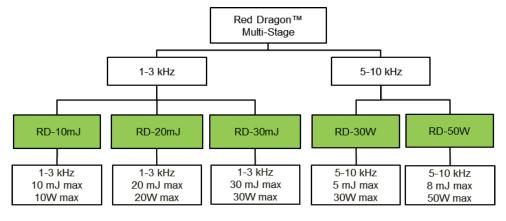
Red Dragon[™] is KMLabs' multi-stage multipass amplifier providing high-energy sub-25 fs pulses. It is a fully engineered and integrated commercial source based on a single rugged opto-mechanical platform. It employs patented (US 6,804,287) cryogenically-cooled amplifier technology, allowing for continuous trade-off between pulse energy and repetition rate.

Tailor the laser output to the optimum for your experiment.

Red Dragon[™] Unique Features

- Highest peak power available at 1 kHz
- Shortest pulses <25fs
- Tunable repetition rate: 1-3 kHz or 5-10kHz in a single instrument
- Clean pulses due to cryogenic thermal management
- 2nd-generation cryocell with improved reliability and maintainability

Red Dragon[™] Product Family



Contact us for full specifications or with questions

Applications

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

Features

- Cryogenic cooling enables highest average powers on the market
- Average power up to 50W
- Pulse energies up to 30 mJ
- Repetition rates from 1 to 10 kHz
- Pulse duration of < 25 fs
- Excellent beam quality: M² typically 1.2 1.3
- Intuitive control software including wavelength, bandwidth, power, and repetition rate control with integrated diagnostics
- Combination of clean (low pedestal), short pulses and high energies gives higher peak intensities for nonliear processes
- CEP stabilization available
- Custom configurations available

