# Stryde - Ultrafast Ti:sapphire oscillator



## **Applications**

- Ultrafast amplifier seeding
- Frequency conversion UV to mid-IR
- Pumping OPOs
- Materials Research
- Femtochemistry
- Spectroscopy
- THz Generation
- Ultrafast Imaging
- 2-photon polymerization
- Pump-probe experiments
- Optical coherence tomography

### **Features**

- Average powers up to > 500 mW
- Maximum pulse energy > 6 nJ
- Computer control of the center wavelength and bandwidth of the oscillator spectrum
- Computer controlled pulse duration
- < 12 fs standard with < 10 fs option
- Excellent beam quality: M<sup>2</sup> typically < 1.2
- One-box configuration with integrated pumps
- Graphical, intuitive software control with integrated diagnostics
- Custom configurations available

# The next generation of engineered reliability: closed-box and hands-free

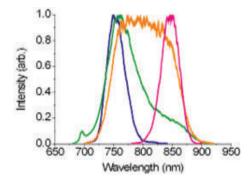


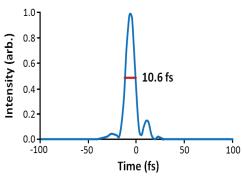
**Stryde**<sup>TM</sup> tunable ultrashort-pulsed ti:sapphire-based oscillator is a fully engineered and integrated commercial source based on a single rugged optomechanical platform.

#### **Stryde Unique Features**

- Computer-controlled tuning of center wavelength
- Computer-controlled tuning of spectral bandwidth
- Ultrashort sub-12 fs pulses

### **Stryde Tunability and Pulse Duration**







### **Stryde Key Specifications**

| Parameter                                    | Specification   |
|--|---|
| Power [Energy]                               | 500 mW  |
| Minimum Pulse<br>Duration                    | < 12 fs (fixed center wavelength)   |
| With proper external dispersion compensation | ≤ 15 fs (780 – 810 nm)  |
|  | < 25 fs (750 – 840 nm)  |
| Wavelength<br>Center                         | 750 – 840 nm  |
| Maximum<br>Bandwidth at<br>800nm             | > 70 nm FWHM  |
| Minimum<br>Bandwidth at<br>800nm             | < 25 nm FWHM  |
| Power Stability                              | < 1% RMS over 24 hrs after warmup   |
| Pointing Stability                           | < 10 μrad RMS over 24 hrs after warmup  |
| Repetition Rate                              | 78 MHz  |
| Pump Laser                                   | Integrated 5W pump  |
| Integrated                                   | Laptop computer and fast  |
| Diagnostics                                  | <ul><li>photodiode included</li><li>Spectrometer and power monitor included</li></ul> |
| Optical<br>Assembly<br>Dimensions            | 24.5" x 14.5" x 5.8"<br>Temperature-stabilized<br>optical platform                    |

