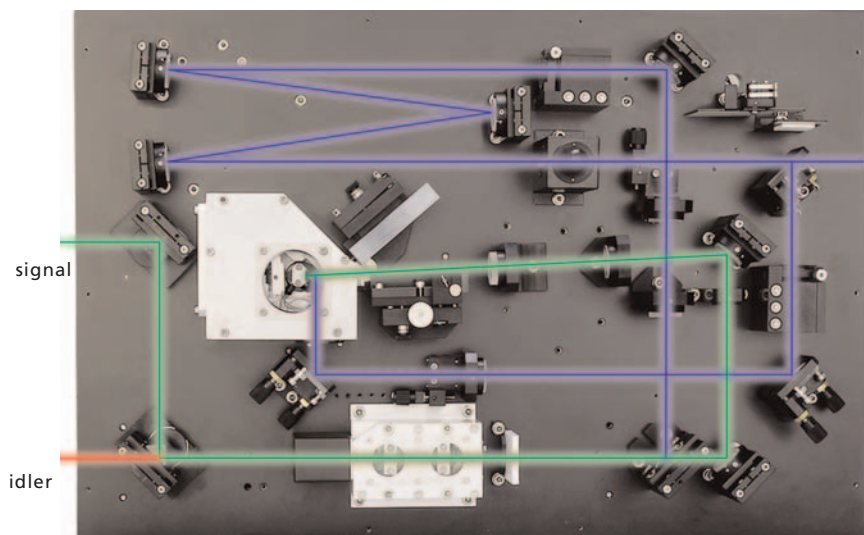


Sunlite™ EX OPO

The Next Generation of OPOs



SUNLITE™ EX OPO FEATURES & BENEFITS

**Widest tuning range with
no degeneracy gap
(445 - 1750 nm)**

**Narrow linewidth over entire
visible tuning range ($< 0.075 \text{ cm}^{-1}$)
US Patent # 5,406,409**

**Wavelength extension available,
FX-1 (222.5 nm - 450 nm)**

**Hermetically sealed,
desiccated, and temperature
stabilized crystal housings**

**Intuitive computer control via
Windows® operating platform
with RS-232 interface**

TUNABLE OPO

SUNLITE EX™ OPO SPECIFICATIONS

DESCRIPTION	Precision II Model Pump Laser		
	PL 8000	PL 9010	PL 9020
Pump Energy (mJ @ 355 nm)	300	350	300
Repetition Rate (Hz)	10	10	20
Tuning Range (nm)	445-1750		
Linewidth ($\leq \text{cm}^{-1}$)	0.075		
Pulsewidth (nsec)	3-6		
Accuracy ¹ ($\pm \text{nm}$)	0.05		
Precision ² ($\pm \text{nm}$)	0.001		
Energy (at peak, mJ)	40	50	40
Beam Pointing Stability ($\pm \mu \text{rad}$)	50	50	75
Divergence ³ (mrad)	< 1.5	< 1.5	< 2.0
Energy Stability ($\pm \%$)	10	10	15
Polarization, vertical (%)	99	99	99
Energy (mJ) vs. Wavelength			
	5 @ 450 nm	6 @ 450 nm	5 @ 450 nm
	22 @ 500 nm	27 @ 500 nm	22 @ 500 nm
	40 @ 550 nm	50 @ 550 nm	40 @ 550 nm
	22 @ 600 nm	27 @ 600 nm	22 @ 600 nm
	22 @ 650 nm	27 @ 650 nm	22 @ 650 nm
	7 @ 700 nm	9 @ 700 nm	7 @ 700 nm
Beam Diameter (mm)	~ 4-6	~ 4-6	~ 4-6
Beam Shape ⁴	Round $\pm 20\%$	Round $\pm 20\%$	Round $\pm 20\%$
Long - Term Frequency Stability ⁵	$< 1 \times \text{linewidth}$	$< 1 \times \text{linewidth}$	$< 1 \times \text{linewidth}$
Power Drift ⁶ ($\pm \%$)	< 10	< 10	< 10

The Sunlite™ EX OPO sets the highest performance standards.

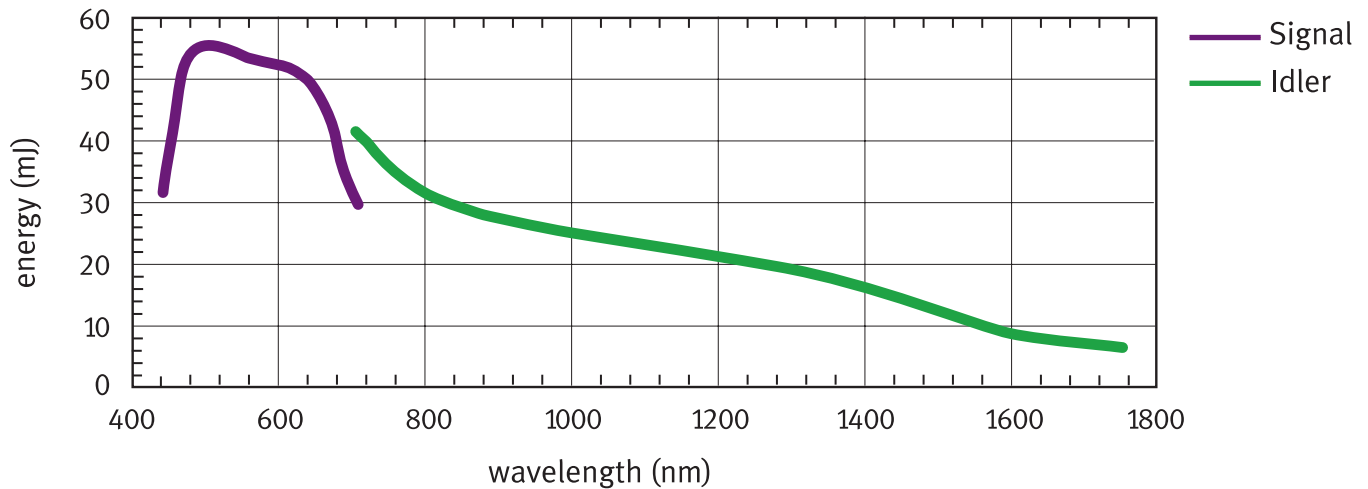
Quality craftsmanship and engineering define Continuum's products. Sunlite™ EX OPO is the workhorse of the modern scientific laboratory. The Sunlite™ EX is the ideal choice for scientists seeking an alternative to dye lasers, or for the convenience of broad tunability in a solid state device without performance compromise. Sunlite™ EX is an unbeatable combination of narrow linewidth, broad tunability, high energy, and high conversion efficiency, all in a compact and easy to operate package.

NOTES

1. Accuracy of electronic readout
2. Mechanical precision while scanning
3. Full angle for 86% ($1/e^2$)
4. Near field, < 1 meter
5. Over a 3 hr period with $< 4^\circ \text{F}$ temperature change
6. Over an 8 hr period with $< 4^\circ \text{F}$ temperature change

All specifications at 550 nm unless otherwise noted.
As a part of our continuous improvement program, all specifications are subject to change without notice.

TYPICAL SUNLITE™ EX OPO's PERFORMANCE WITH SEEDED PL9010



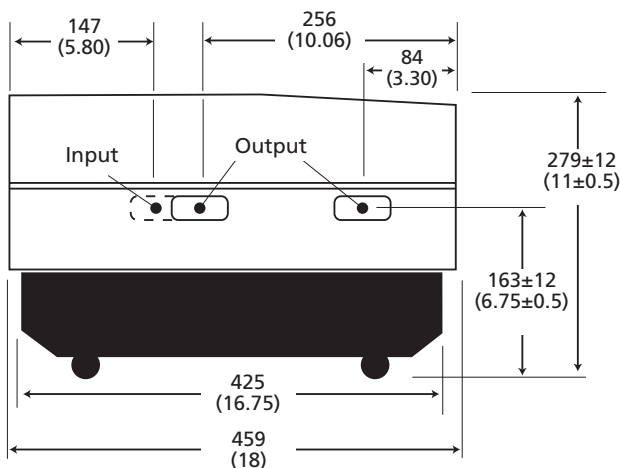
APPLICATIONS:

- High Resolution Spectroscopy
- Emission Studies
- Pump-Probe Experiments
- Combustion Studies
- Fluorescence Studies
- Multi-Photon Excitation
- Nonlinear Optical Materials
- Remote Sensing
- Photolysis
- LIDAR
- CARS

SUNLITE™ EX OPO PHYSICAL LAYOUT

All dimensions in mm (inches).

Front view



Side view

