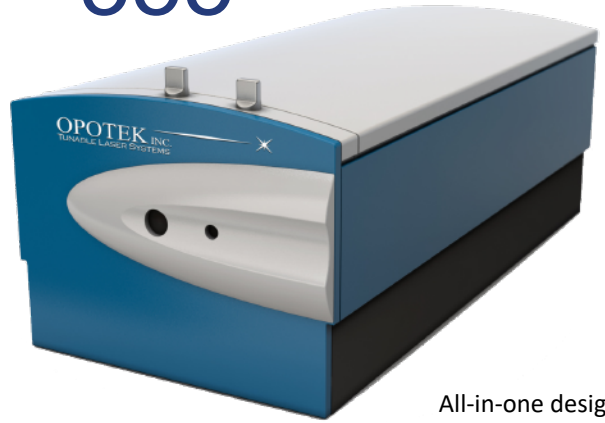
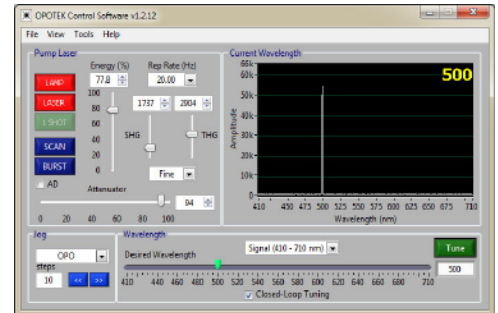
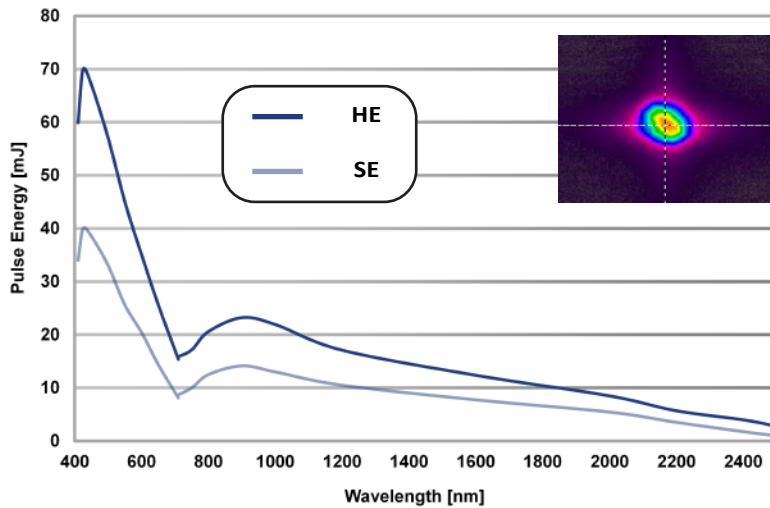


RADIANT™ 355

The RADIANT™ tunable laser series utilizes optical parametric oscillator technology to generate wavelengths over a broad range in the UV, VIS and IR. Integration of system components into one compact unit increases ruggedness, minimizes misalignment and allows the user to reposition the system. Included verification hardware enables the user to confirm beam paths are preserved after shipment or relocation. Hermetically sealed modules protect sensitive optical materials from the environment. All tunable beams exit the system from the same port resulting in one beam path to the end-user's application. Wavelength tuning is motorized and computer controlled.



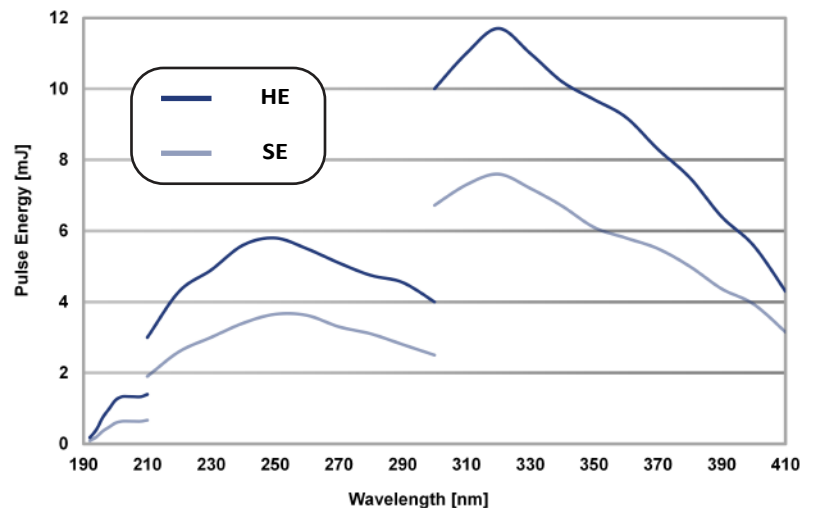
All-in-one design integrates pump laser, OPO, harmonics, optics and control electronics



Built in Wavemeter™ monitors wavelength in real-time and provides feed-back for harmonics auto-optimization and Closed-Loop Tuning™.



System includes access to full power 355/532/1064 pump laser beams.



Extend the tuning range with the UV (210-410 nm) or EUV (192-410 nm) tuning and One-Port-One Path™ modules that maintain one optical path for all tunable beams. Tuning curves represent nominal values.



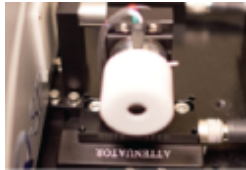
Specifications

	RADIANT™ SE 355 LD	RADIANT™ HE 355 LD	Notes
Wavelength Range (nm)	410 - 2500		motorized auto range selection
Peak Pulse Energy (mJ)	40	70	see tuning curve nominal
Peak Efficiency (%)	> 35	> 40	peak OPO energy ÷ pump energy
Pulse-Pulse Stability (% RMS)	< 3.5	< 3.0	measured at 450 nm (1000 pulses)
Spectral Linewidth (cm ⁻¹)	4 - 6		theoretical
Linear Polarization	Horizontal : Vertical		signal : Idler
Beam Divergence (mrad)	< 1.5		FWHM signal
Pulse Length (ns)	5		FWHM ± 2 ns nominal
Repetition Rate (Hz)	10		divide-by-N lower repetition rates
Beam Diameter (mm)	6.5	9	near-field
Residual 355 Pump Access (mJ)	30 - 60	40 - 80	varies based on OPO wavelength

Features

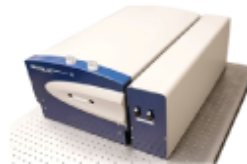
- Integrated Pump Laser
 - Full Power Pump Beam Access
 - Harmonics
 - Alignment Verification™
 - External Triggering
 - Computer Control
 - Wavemeter™
 - Software Development Kit
- Light and compact with quick connect cables and 100 million pulse flashlamp lifetime
- End-user insertable mirrors to redirect full power 355/532/1064 beams for experimental use
- Motorized phase matching, temperature-controlled, hermetically sealed
- Hardware provided to verify system alignment after movement
- Flashlamp and Q-switch IN/OUT, TTL, BNC connectors
- All laser and OPO functions, SCAN/BURST modes
- Real-time wavelength monitoring, Closed-Loop Tuning™ and harmonics auto-optimization
- Integration of system functions into third-party programming environments

Options



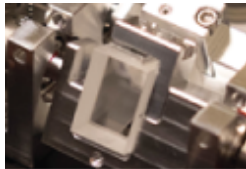
Motorized Variable Attenuator

Internal PC-controlled optical attenuator to vary the OPO pulse energy, removeable (410-2500 nm only)



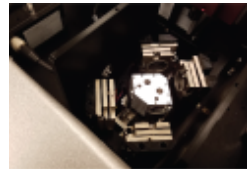
4th or 5th Harmonic Generator

External housing for a fourth (266 nm) or fifth (213 nm) harmonic generator



UV Tuning

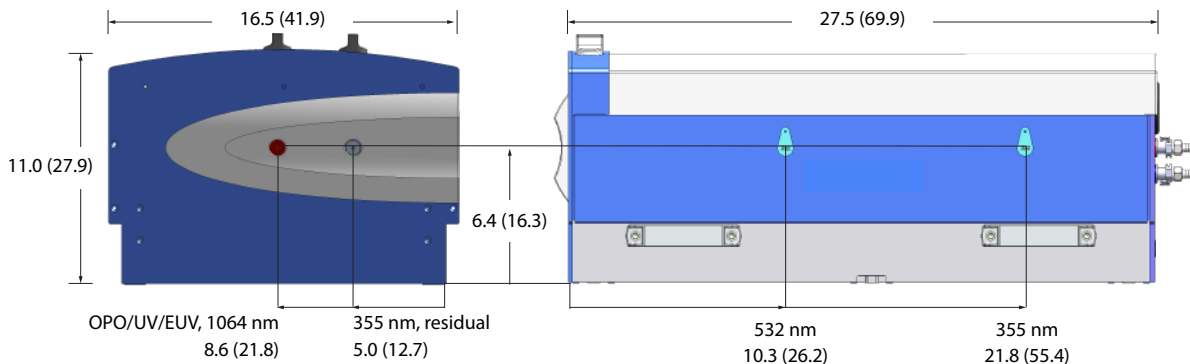
UV Tuning Module (210-410 nm) with One-Port-One-Path™ wavelength separation, hermetically sealed, removeable



Extended UV Tuning

Extended UV Tuning Module (192-410 nm) with One-Port-One-Path™ wavelength separation, hermetically sealed, removeable

Dimensions



OPO Laser Head
OPO Control Electronics
Pump Laser Power Supply

100 lbs (45.4 kg)
integrated | universal line voltage
20 (50.7) x 11.1 (28.3) x 20.2 (51.3) | 59.5 lbs (27 kg)
universal line voltage | closed-cycle water-cooled

Version 2002d0118 © 2018

Trademarks are the property of OPOTEK.

All dimensions approximate in inches (centimeters).

All specifications are subject to change due to ongoing product improvements.

