

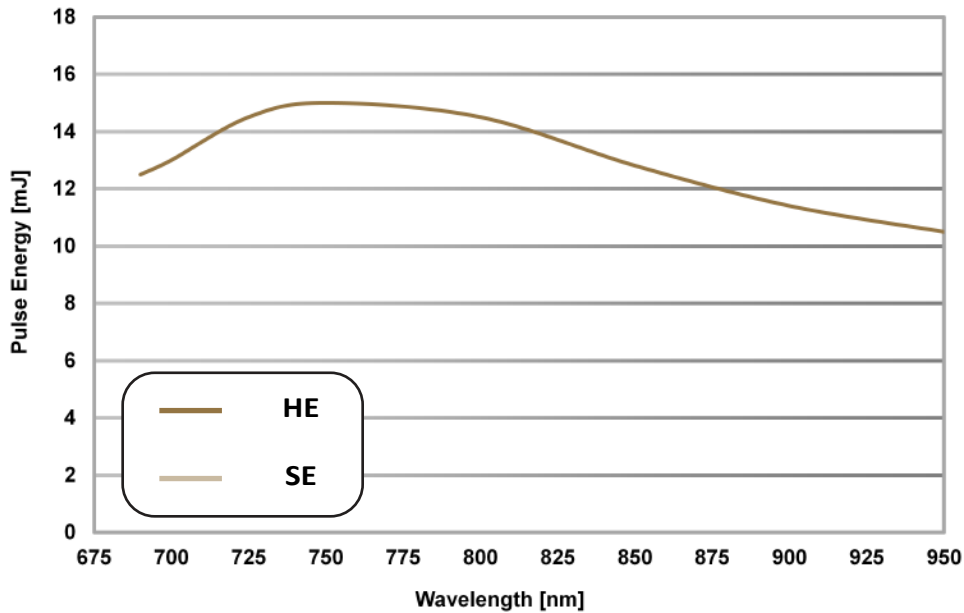


Phocus™ Mini

Designed for portability, the Phocus™ Mini generates nanosecond, NIR pulse energies for photoacoustic imaging applications that require less power. The entire laserhead fits into a 7x12" footprint and ships completely hermetically sealed to protect optical components from the environment. Requiring no installation, the system includes verification hardware to check alignment after shipping or relocation. The size of the system eases integration of the light source inside commercial instrumentation with space constraints. Wavelength tuning is motorized and computer controlled.



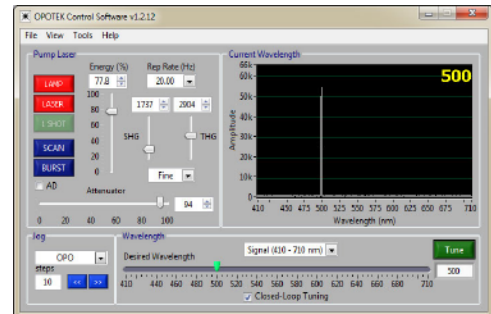
All-in-one design integrates pump laser, OPO and optics



Hermetically sealed Arrow™ OPO Cavity with over 30% peak conversion efficiency. Tuning curves represent nominal values.



System includes access to residual 532/1064 pump laser beam.



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

Specifications

	Phocus™ HE MINI	Notes
Wavelength Range (nm)	690 - 950	motorized
Peak Pulse Energy (mJ)	15	see tuning curve nominal
Peak Efficiency (%)	> 30	peak OPO energy ÷ pump energy
Pulse-Pulse Stability (% RMS)	< 2.0	measured at 750 nm (1000 pulses)
Spectral Linewidth (cm ⁻¹)	30 - 80	theoretical
Linear Polarization	Horizontal	
Beam Divergence (mrad)	< 10	FWHM
Pulse Length (ns)	6	FWHM ± 2 ns nominal
Repetition Rate (Hz)	20	divide-by-N lower repetition rates
Beam Diameter (mm)	4	near-field
Residual 532 Pump Access (mJ)	20 - 25	varies based on OPO wavelength

Features

- Integrated Pump Laser Light and compact with quick connect cables and 50 million pulse flashlamp lifetime
- Residual Pump Beam Access Optical hardware to redirect residual 532/1064 beams for experimental use
- Harmonics Motorized phase matching, temperature-controlled, hermetically sealed
- Alignment Verification™ Hardware provided to verify system alignment after movement
- External Triggering Flashlamp and Q-switch IN/OUT, TTL, BNC connectors
- Computer Control All laser and OPO functions, SCAN/BURST modes
- Wavemeter™ Real-time wavelength monitoring, Closed-Loop Tuning™ and harmonics auto-optimization
- Software Development Kit Integration of system functions into third-party programming environments

Options



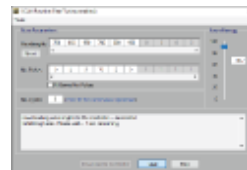
Motorized Variable Attenuator
External PC-controlled optical attenuator to vary the OPO pulse energy, removeable



Fiber Delivery
1 mm diameter, High Power SMA fiber (0.22 NA), coupling lens, mounting hardware

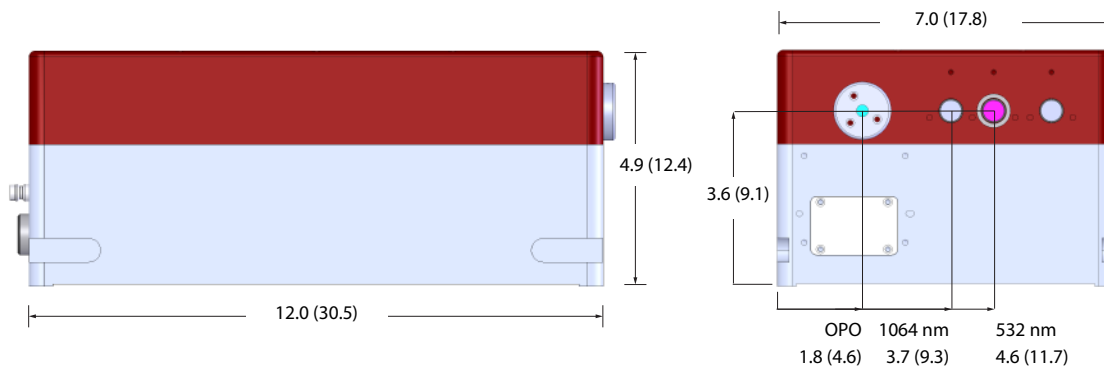


Protective Hard Case
Two protective hard cases with custom foam padding in place of standard wooden crate



Fast Tuning™
Wavelength can be tuned to any value within 690 - 950 or 1200 - 2400 nm at every pulse

Dimensions



OPO Laser Head
OPO Control Electronics
Pump Laser Power Supply

25 lbs (11 kg)
11.5 (29.2) x 10.3 (26.2) x 3.8 (9.7) | 5 lbs (2.3 kg) | universal line voltage
17.2 (43.5) x 5.3 (13.3) x 14.2 (36.0) | 31 lbs (14 kg)
universal line voltage | closed-cycle water-cooled

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All dimensions approximate in inches (centimeters).
All specifications are subject to change due to ongoing product improvements.

