



OPOTEK takes compactness and portability to the next level with the Opolucis™ AIR. Based on diode-pumped solid state (DPSS) technology, the Opolucis™ AIR is all air-cooled and includes the power supply, control electronics and optical platform all-in-one unit. With tuning ranges from the UV to the mid-infrared, the Opolucis™ AIR is suitable for integration into instrumentation or confined laboratory spaces that benefit from low RF noise equipment and cannot tolerate water cooled solutions.

SYSTEM FEATURES

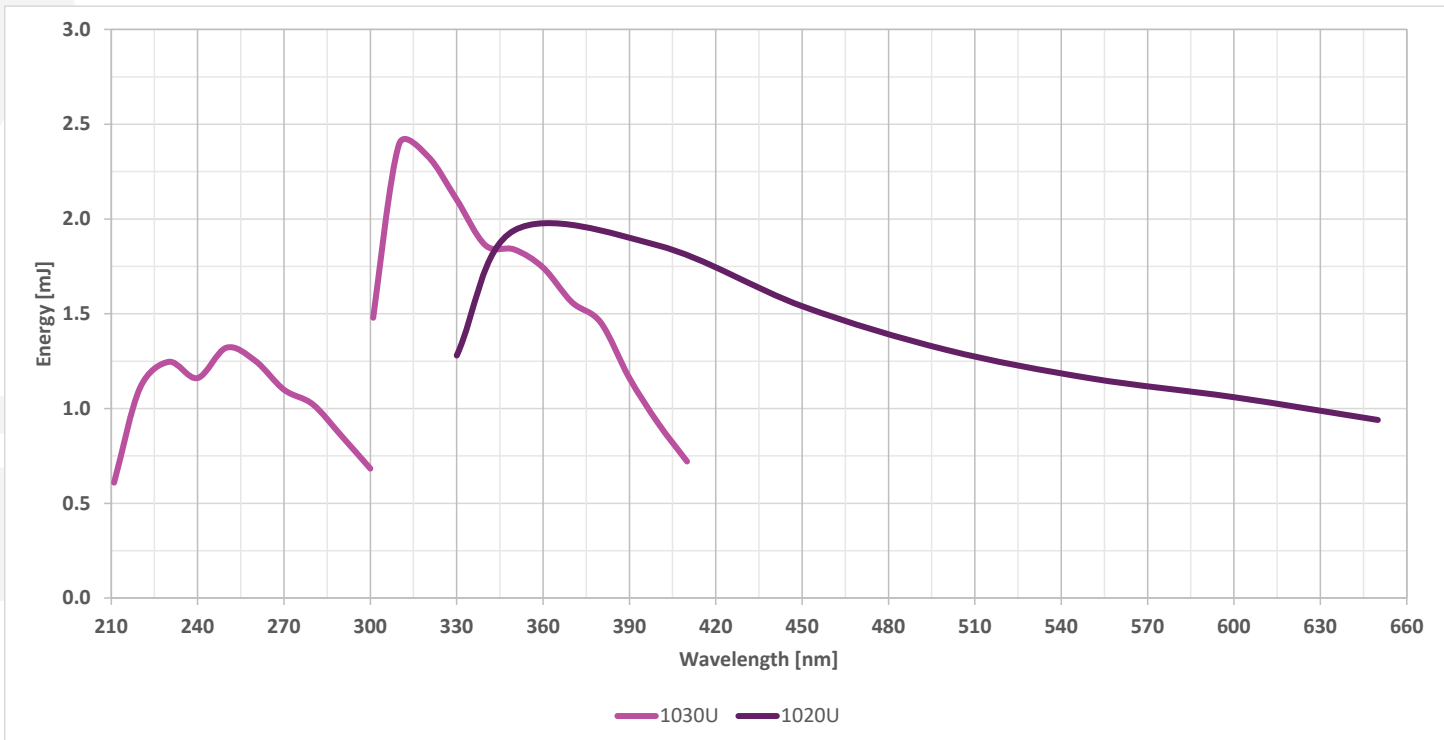
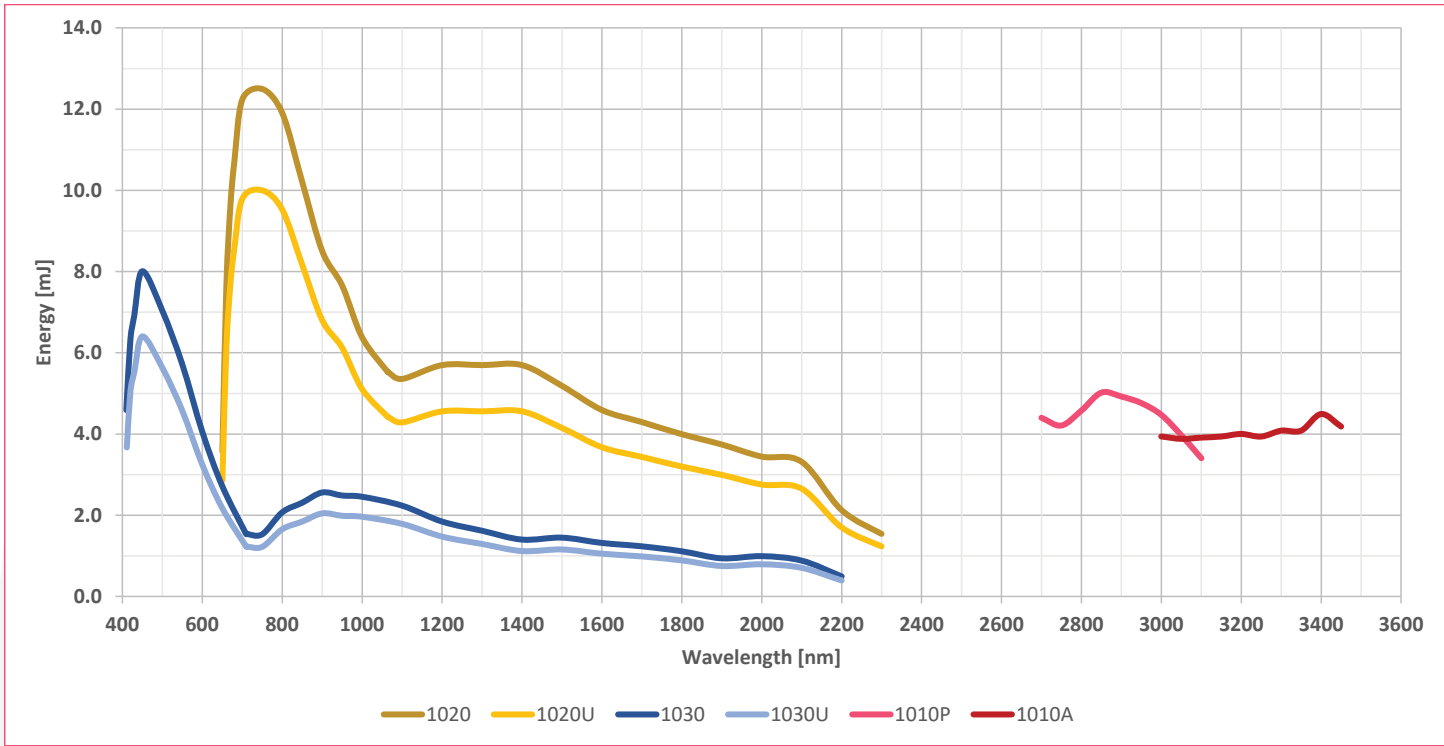
- Fully integrated, all-in-one unit
- Completely air-cooled
- DPSS lifetime: 4 billion laser shots
- DPSS and/or Q-Switch external triggering
- Computer controlled via a single USB connection
- Control software and software development kit (SDK)
- Programmable scans
- No factory installation required
- End user accessible alignment verification
- Fast temperature stabilized pump laser and harmonics
- All tunable wavelengths output from a single port
- Access to higher energy 1064, 532 and 355 nm beams
- All wavelengths accessible without manual configuration changes

APPLICATIONS

- Solar Panel Characterization
- Non Destructive Testing (NDT)
- Optical Coating Calibration
- MALDI Mass Spectrometry
- Time Resolved Spectroscopy
- Raman Spectroscopy
- Laser Induced Fluorescence
- Confocal Microscopy
- Transient Absorption Spectroscopy
- *Any application requiring tunable, pulsed laser light in an all-in-one, air-cooled form factor*

OPTIONS

- UV Tunability Add-on (210-410 nm)
- UV-VIS Tunability Add-on (330-650 nm)
- Motorized Variable Attenuator
- Real-Time Wavelength Monitoring
- Fiber Delivery Kit (350-2000 nm)
- Fast Tuning (< 50 ms between wavelengths)



SPECIFICATIONS	1010A	1010P	1020	1030
WAVELENGTH RANGE (nm)	3000 - 3450	2700 - 3100	650 - 2300	410 - 2200
w/ UV (option)	--	--	330 - 2300 (1020U)	210 - 2200 (1030U)
Peak or Max OPO/UV Pulse Energy (mJ)	<i>See tuning curves</i>			
Repetition Rate (Hz)	20			
Pulse to Pulse Stability (%)¹	2			
Linewidth (cm⁻¹)	2.5 - 3.5		10 - 15 ²	3 - 5 ³
Tuning Step Resolution (nm)			< 1.0	< 0.5
Signal	--	--	< 0.5	< 0.1
Idler	< 0.5		< 1.0	< 0.5
Pump Energy (mJ)	100 @ 1064 nm		50 @ 532 nm	33 @ 355 nm
Pulse Duration (ns)⁴	< 9			
Beam Diameter (mm)⁵	5			
Beam Divergence (mrad)⁶	< 10		< 2	< 2
Signal Polarization	--		Horizontal	
Idler/UV Polarization	Vertical			
Residual 1064 nm Access (mJ)	50		40	25
Residual 532 nm Access (mJ)	--		20	20
Residual 355 nm Access (mJ)	--		--	10

¹ RMS @ peak OPO, 99% of shots

³ 410 nm and higher

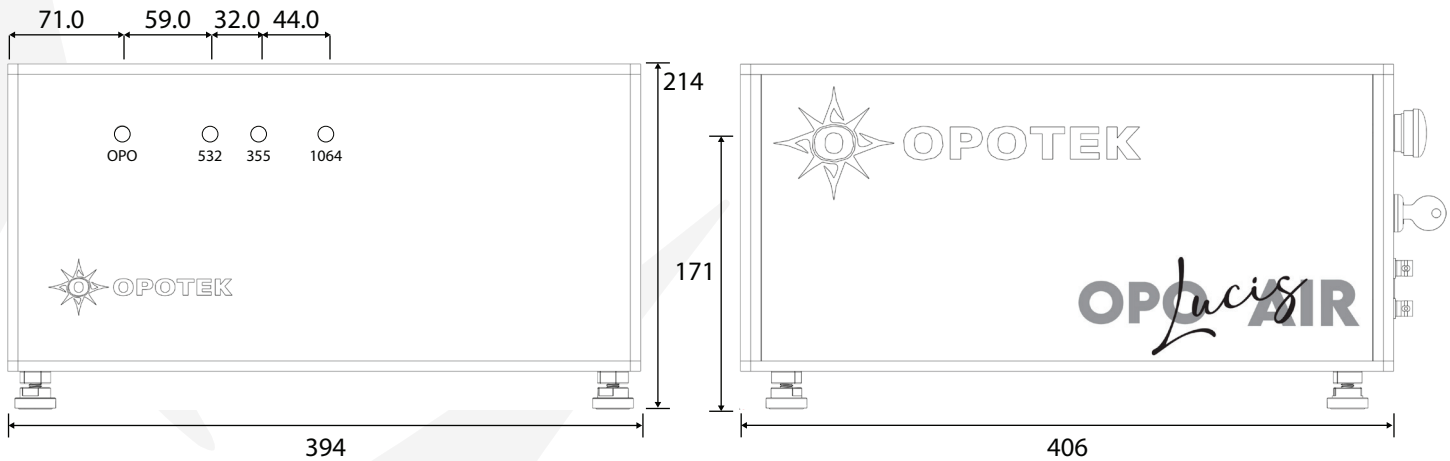
⁵ At output port

² 670 nm and higher

⁴ FWHM

⁶ Full angle, at 1/e² of the peak; @ peak OPO

OPOLUCIS AIR LASERHEAD (20 Kg)



PORT LAYOUT FOR MODEL 1030 & 1030U SHOWN

OPERATING REQUIREMENTS

- 64-82°F / 18-28 °C ambient operating environment
- 100-240 VAC, 50/60 Hz

OPOTEK LLC is certified to ISO 9001:2015. VERSION 1.11

Tuning curves represent nominal values.

Dimensions approximate in millimeters.

Due to ongoing product improvements, all specifications are subject to change without notice.

Designed and manufactured in California, USA.