



OPOTEK continues its tradition of offering the smallest form factor tunable lasers with the Opolette UX. Built to accommodate the diverse needs of our customers, the Opolette UX fits the tight constraints of the modern laboratory while continuing to offer wide tunable ranges from the UV to MIR. The Opolette UL is enclosed in an even smaller form factor and tuned to the absorption of water for the desorption, capture, ionization or other manipulation of biomolecules on the sub-millimeter scale.

SYSTEM FEATURES

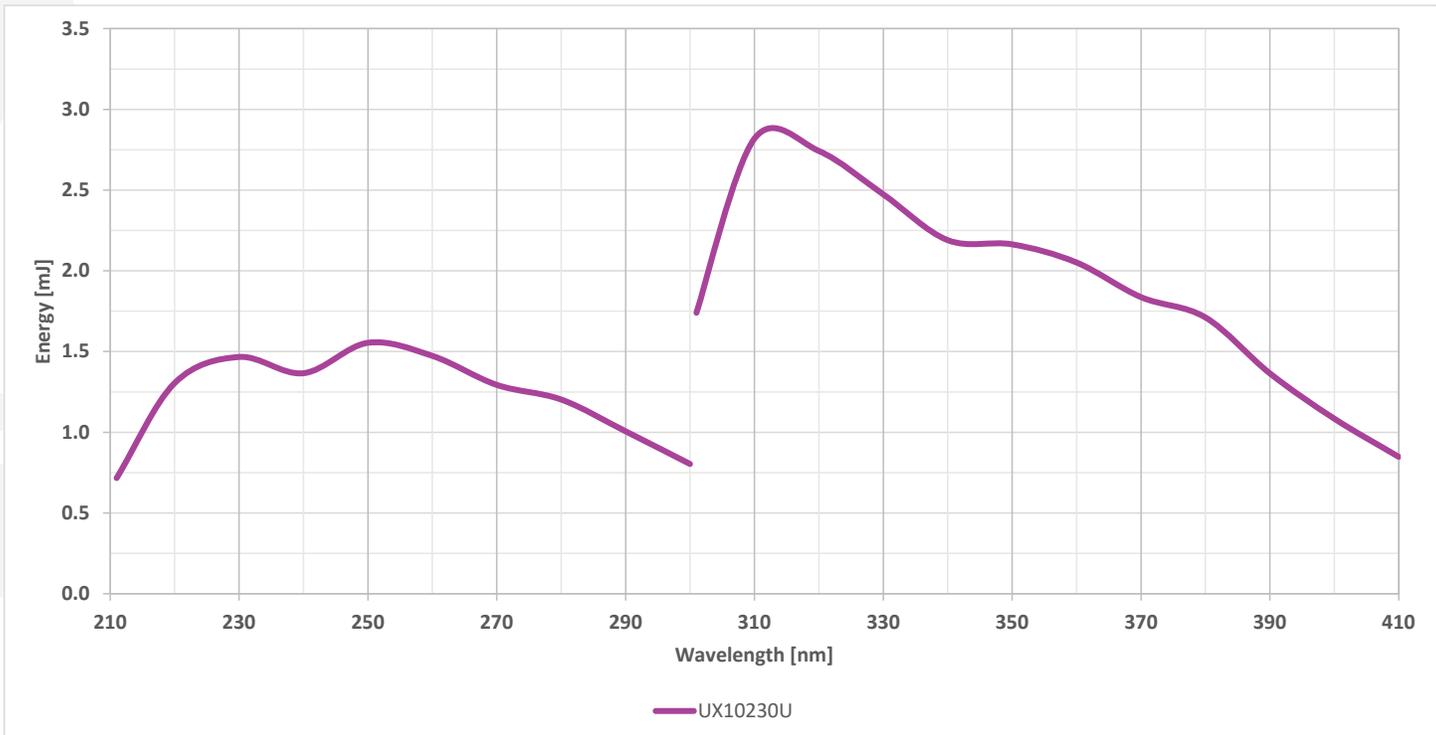
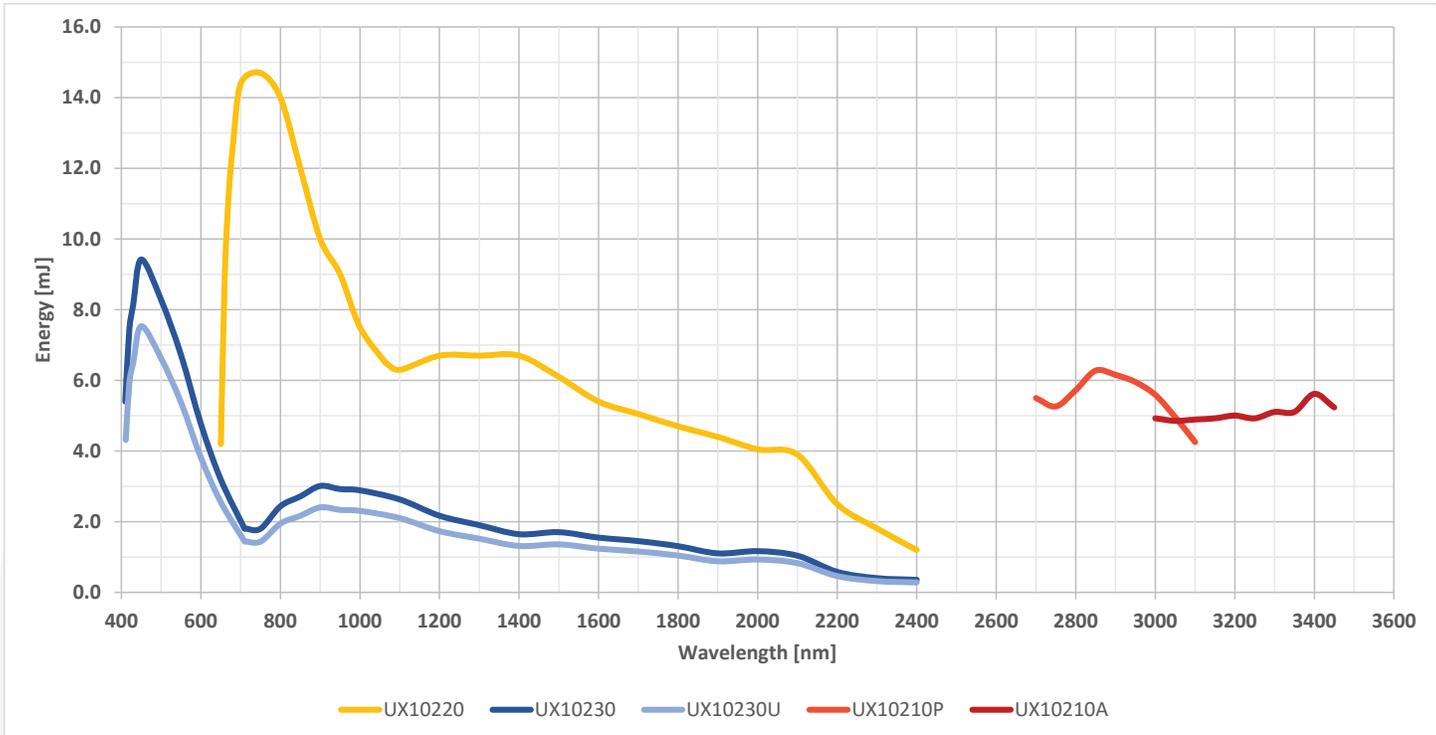
- Industry leading ultra-compact and truly-integrated laserhead
- Flashlamp based pump laser with minimal maintenance
- Flashlamp lifetime: 50 million laser shots
- Flashlamp and/or Q-Switch external triggering
- Computer controlled via a single USB connection
- Control software and software development kit (SDK)
- Programmable scans (UX series)
- No factory installation required
- End user accessible alignment verification
- Fast temperature stabilized pump laser and harmonics (< 20 min)
- All tunable wavelengths output from a single port
- Access to 1064 nm, 532 nm and/ or 355 nm where applicable

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 a small form factor*

OPTIONS

- UV Tunability Add-on (210-410 nm)
- External Motorized Variable Attenuator
- Real-Time Wavelength Monitoring
- Fiber Delivery (350-2000 nm)



SPECIFICATIONS	UL10210PF	UX10210A	UX10210P	UX10220	UX10230
WAVELENGTH RANGE (nm)	2940	3000 - 3450	2700 - 3100	650 - 2400	410 - 2400
w/ UV (option)	--	--	--	--	210 - 2400
Peak or Max OPO/UV Pulse Energy (mJ)	6	<i>See tuning curves</i>			
Repetition Rate (Hz)				20	
Pulse to Pulse Stability (%)¹				2	
Linewidth (cm⁻¹)	< 3	2.5 - 3.5		10 - 15 ²	3 - 5 ³
Tuning Step Resolution (nm)					
Signal	--	--	--	< 0.5	< 0.1
Idler	--	< 0.5		< 1.5	< 1.0
Pump Energy (mJ)	90 @ 1064 nm			50 @ 532 nm	30 @ 355 nm
Pulse Duration (ns)⁴				< 7	
Beam Diameter (mm)⁵				4	
Beam Divergence (mrad)⁶	< 10			< 2	
Signal Polarization	--	--	--	Horizontal	
Idler/UV Polarization	Vertical				
Residual 1064 nm Access (mJ)	50		40		25
Residual 532 nm Access (mJ)	--		20		
Residual 355 nm Access (mJ)	--		--		10

¹ RMS @ peak OPO, 99% of shots

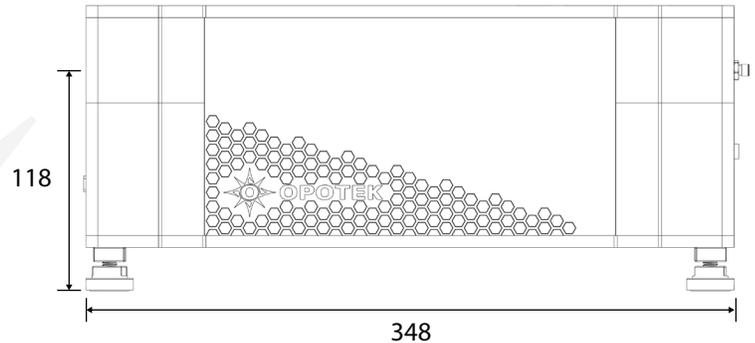
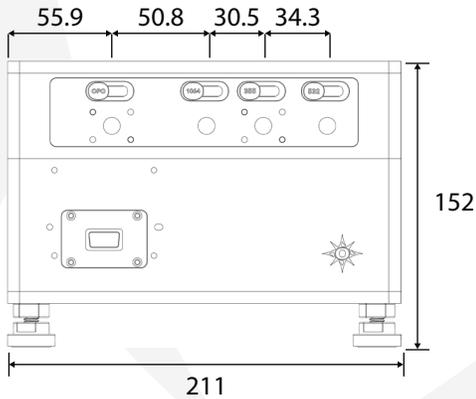
³ 410 nm and higher

⁵ At output port

² 670 nm and higher

⁴ FWHM

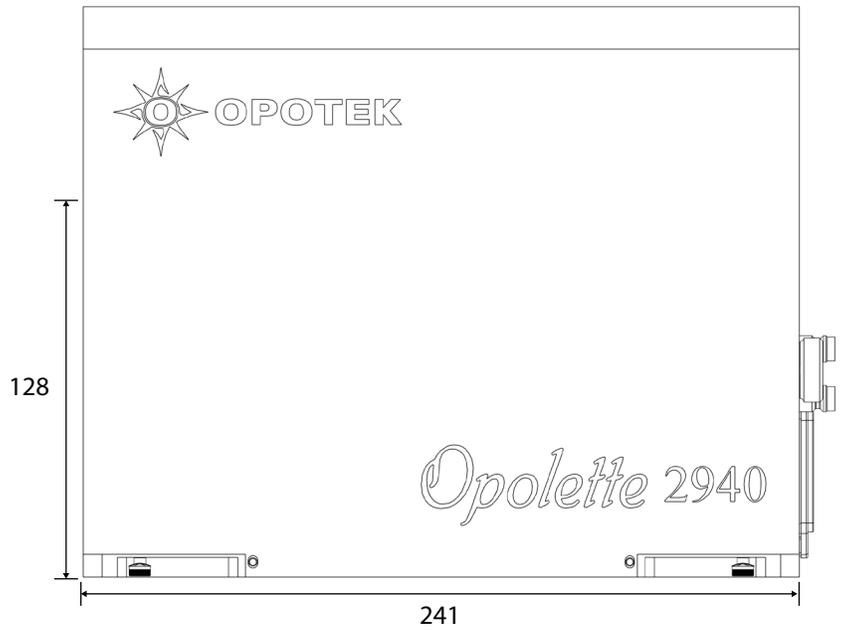
⁶ Full angle, at 1/e² of the peak, @ peak OPO

OPOLETTE UX LASERHEAD (13.6 Kg)

PORT LAYOUT FOR MODEL 10230 SHOWN
POWER SUPPLY (14.1 Kg)

- 360 x 133 x 435 (L x W x H)
- Integrated air-water heat exchanger
- Distilled water coolant
- 64-82°F / 18-28 °C ambient operating environment
- 100-240 VAC, 50/60 Hz, single phase 750 VA
- Easy to replace inline DI filter

OPO ELECTRONICS BOX (2.30 Kg)

- 330 x 280 x 89.0 (L x W x H)
- 64-82°F / 18-28 °C ambient operating environment
- 100-240 VAC, 50/60 Hz
- External for easy service and upgrading

OPOLETTE UL LASERHEAD (4.5 Kg)

POWER SUPPLY (14.1 Kg)

- 360 x 133 x 435 (L x W x H)
- Integrated air-water heat exchanger
- Distilled water coolant
- 64-82°F / 18-28 °C ambient operating environment
- 100-240 VAC, 50/60 Hz, single phase 750 VA
- Easy to replace inline DI filter



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.