



RADIANT X

TUNABLE LASER SYSTEM

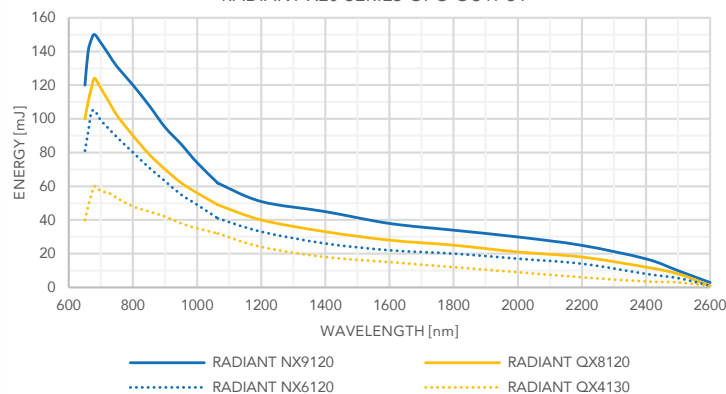


The next generation of RADIANT tunable laser systems has arrived! With the assistance of our loyal customers, OPOTEK has redesigned the versatile RADIANT tunable laser system with an increase of up to 50% output energy per pulse in a 12% smaller package. The RADIANT X is light-sealed and fully motorized so that all tunable wavelengths are accessible from a single port.

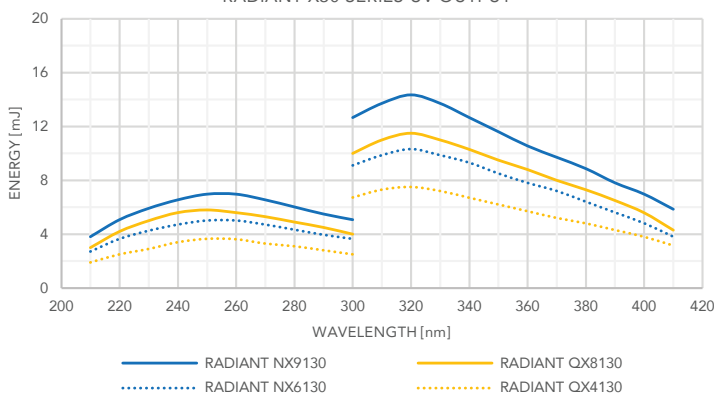
Required installations are now a thing of the past. The RADIANT X is designed to withstand the rigors of shipping. With an external alignment verification that takes minutes for any user to perform, the RADIANT X can be operational the same day it is received.

New to the list of features for the RADIANT X tunable laser system is an easy mount solution for users looking to integrate the RADIANT X into a larger OEM system.

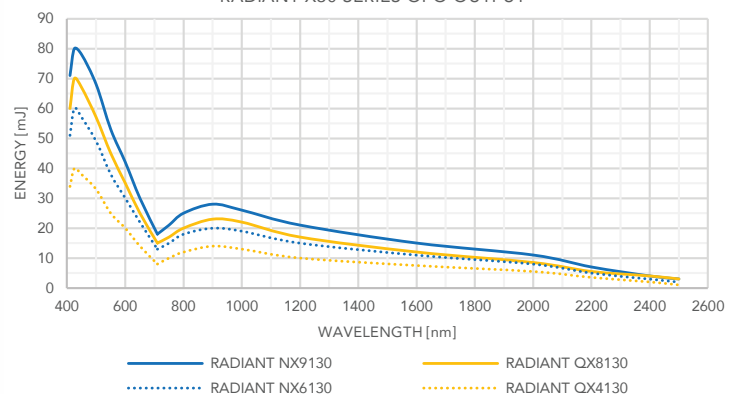
RADIANT X20 SERIES OPO OUTPUT



RADIANT X30 SERIES UV OUTPUT



RADIANT X30 SERIES OPO OUTPUT

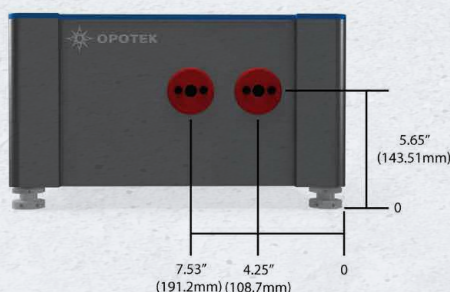
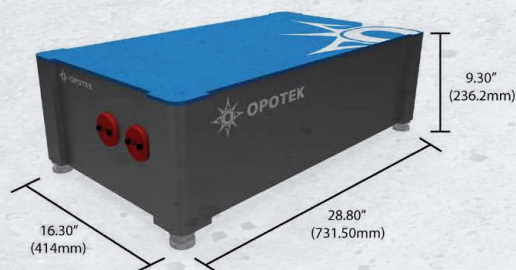


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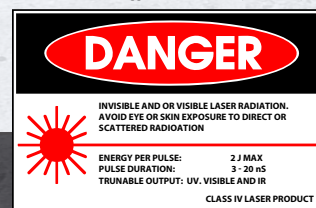
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RADIANT X SERIES SPECIFICATIONS

	RADIANT QX4120	RADIANT QX8120	RADIANT NX6120	RADIANT NX9120	RADIANT QX4130	RADIANT QX8130	RADIANT NX6130	RADIANT NX9130
WAVELENGTH RANGE (nm)								
SIGNAL	650-1064				410-710			
IDLER	1064-2600				710-2500			
UV (optional)	---				210-410			
OPO CHARACTERISTICS								
PEAK OPO ENERGY [mJ]	60	120	100	150	40	70	60	80
PULSE TO PULSE STABILITY (RMS % @ PEAK OPO WL)	2				2			
PUMP LASER RESIDUAL ENERGY [mJ]	40 - 50 at 532 nm	80 - 100 at 532 nm	70 - 80 at 532 nm	100 - 120 at 532 nm	30 - 60 at 355 nm	40 - 80 at 355 nm	50 - 70 at 355 nm	60 - 100 at 355 nm
LINEWIDTH (cm ⁻¹)	4-7				4-7			
TUNING RESOLUTION (cm ⁻¹)	<1				<1			
PULSE DURATION (ns)	6	6	8	8	6	6	7	7
BEAM DIAMETER (mm)	6.5	9	7	8	6.5	9	7	8
BEAM DIVERGENCE (mrad)	<2				<1.5			
SIGNAL POLARIZATION	Horizontal				Horizontal			
IDLER POLARIZATION	Vertical				Vertical			
PUMP LASER								
PUMP WAVELENGTH (nm)	532				355			
PUMP ENERGY (mJ)	150	400	270	420	110	200	140	210
PULSE DURATION (ns)	6	6	8	8	6	6	7	7
BEAM DIVERGENCE (mrad)	<1				<1			
PULSE TO PULSE STABILITY (%)	<4				<6			
PULSE REPETITION RATE (Hz)	10 or 20	10	10	10	10 or 20	10	10	10
DIMENSIONS (L x W x H) [inches (cm)]								
LASER HEAD	28.8x16.3x9.3 (73.1x41.4x23.6)				28.8x16.3x9.3 (73.1x41.4x23.6)			
CONTROL ELECTRONICS BOX	11.5x10.3x3.8 (29.2x26.2x9.7)				11.5x10.3x3.8 (29.2x26.2x9.7)			
UMBILICAL LENGTH (m)	2.5				2.5			
PUMP LASER POWER SUPPLY	11.1x19.9x20.2 (28.3x50.7x51.3)	11.1x19.9x20.2 (28.3x50.7x51.3)	22.3x23.2x11.6 (56.8x59.0x29.6)	22.3x23.2x11.6 (56.8x59.0x29.6)	11.1x19.9x20.2 (28.3x50.7x51.3)	11.1x19.9x20.2 (28.3x50.7x51.3)	22.3x23.2x11.6 (56.8x59.0x29.6)	22.3x23.2x11.6 (56.8x59.0x29.6)
LASER HEAD WEIGHT [lbs (kg)]	100 (45.4)				100 (45.4)			
PUMP LASER POWER SUPPLY WEIGHT [lbs (kg)]	59.5 (27)	59.5 (27)	65 (29.5)	65 (29.5)	59.5 (27)	59.5 (27)	65 (29.5)	65 (29.5)
OPERATING REQUIREMENTS								
COOLANT SYSTEM	Distilled water				Distilled water			
ROOM TEMPERATURE (°C)	18-28				18-28			
ENVIRONMENT CONDITIONS	Pollution degree 2 or better				Pollution degree 2 or better			
POWER REQUIREMENTS	100-240 VAC, 50Hz/60Hz				100-240 VAC, 50Hz/60Hz			



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 All specifications are subject to change due to
 ongoing product improvements.
 All tuning curves represent nominal values.
 All dimensions approximate in inches (centimeters)



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