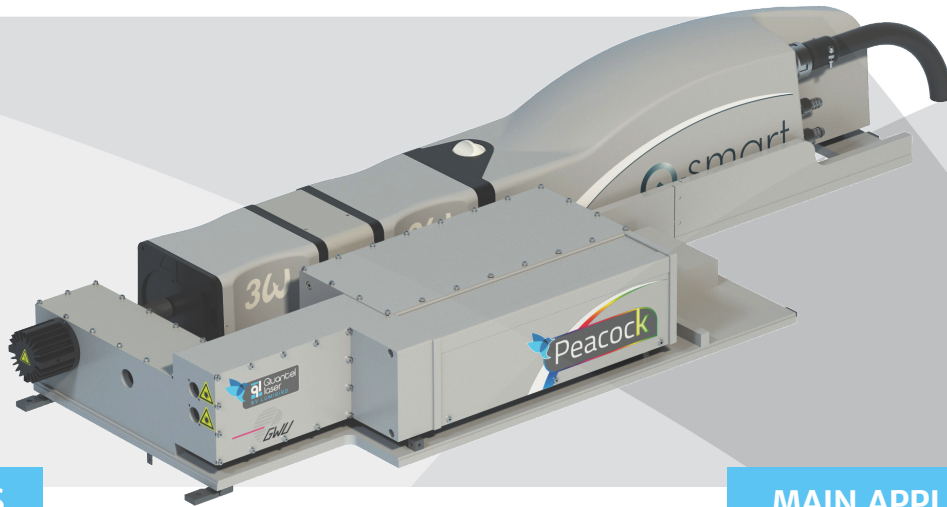


# PEACOCK XT 355 (VIS-NIR)

Pulsed Nd:YAG and Optical Parametric Oscillator  
Integrated System



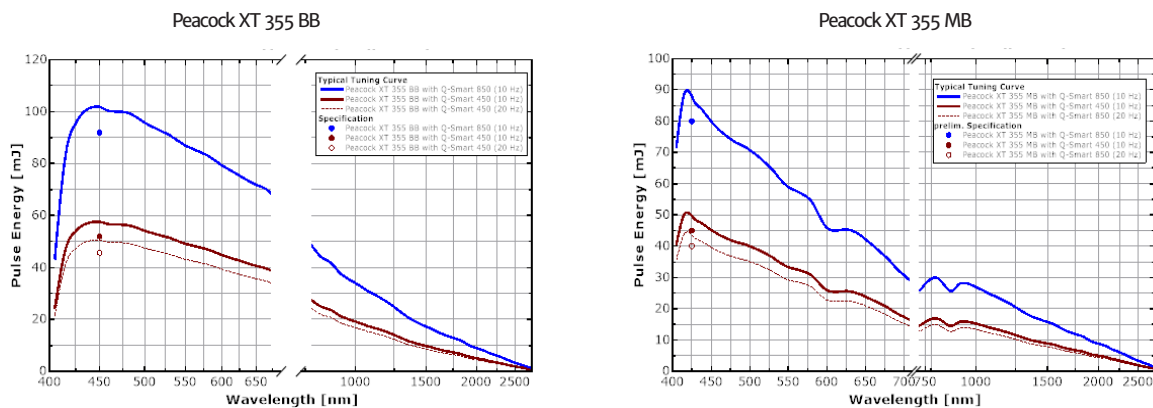
## MAIN FEATURES

- Compact, integrated Nd:YAG-OPO platform
- 355 nm pumping for extended VIS-NIR tuning
- Broadband (BB) and mid-band (MB) linewidth available
- Up to 90 mJ
- 10 Hz or 20 Hz repetition rate
- Fast shot-to-shot wavelength tuning across the entire range
- Real-time energy measurement
- Optional wavelength measurement
- Fully automated for hands-free operation
- User defined fiber-delivery or free-space output

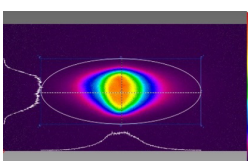
## MAIN APPLICATIONS

- MEDICAL & BIOTECHNOLOGY
- SPECTROSCOPY
- REMOTE SENSING
- PHOTOACOUSTIC IMAGING
- LiDAR

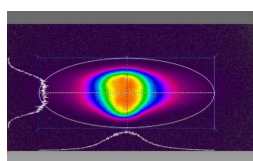
### Typical tuning curve



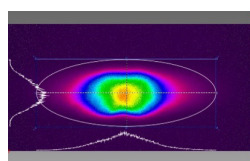
### Typical beam profiles



Peacock XT 355-MB  
@ 450 nm



Peacock XT 355-MB  
@ 550 nm



Peacock XT 355-MB  
@ 650 nm

[www.quantel-laser.com](http://www.quantel-laser.com)

Many options and configurations are available. Please contact Lumibird to find the best match for your needs and compatibility between options.



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# PEACOCK XT 355 (VIS-NIR)

Pulsed Nd:YAG and Optical Parametric Oscillator  
Integrated System



## SPECIFICATIONS

Peacock XT 355							
		BB - 140		BB - 280		MB - 280	
Wavelength (nm)	Signal	405 - 690				405 - 2850	
	Idler	730 - 2630					
Repetition rate (Hz) <sup>(1)</sup>		10	20	10	10	20	10
Peak energy (mJ)		52	45	90	45	40	80
Pulse duration (ns) <sup>(2)</sup>		< 5					
Beam diameter (mm) <sup>(3)</sup>		< 7		< 9.5		< 9.5	
Linewidth		0.3 nm - 15 nm <sup>(4)</sup>				< 4.5 cm <sup>-1</sup>	
Beam divergence (mrad) <sup>(5)</sup>	Horizontal	< 8				< 6	
	Vertical	< 10				< 1.5	
Pump laser (Q-smart 450/850)							
Wavelength (nm)		355					
Energy per pulse (mJ)		130	120	230	130	120	230
Pulse duration (ns) <sup>(2)</sup>		≈ 5					
Beam diameter (mm) <sup>(6)</sup>		≈ 6.5		≈ 9		≈ 9	
Beam divergence (mrad) <sup>(7)</sup>		< 0.5					

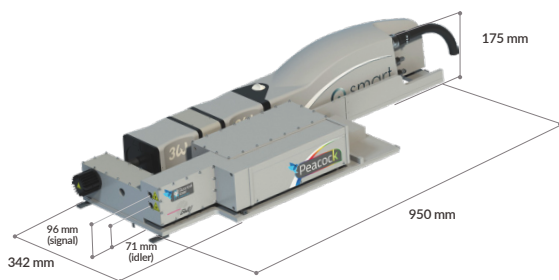
- (1) Other repetition rates on request  
 (2) Measured at FWHM with fast photodiode and 1 GHz oscilloscope  
 (3) At the output of the OPO  
 (4) Linewidth depends on wavelength  
 (5) Full angle, at FWHM  
 (6) At the output of the laser  
 (7) Full angle, at 1/e<sup>2</sup> of the peak

## OTHER INFORMATION

Power requirements	100-240 VAC, 50/60 Hz, single phase
Cooling	Water to air
Operating temperature	18 °C to 28 °C
Storage temperature <sup>(8)</sup>	- 10 °C to + 50 °C
Cable length (m) <sup>(9)</sup>	3
Flashlamps warranty <sup>(10)</sup>	100 million shots

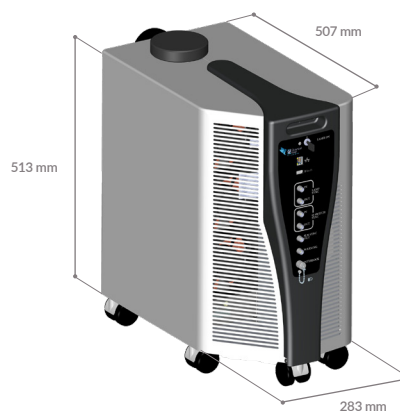
- (8) System rinsed and drained with ethylene glycol/water mixture  
 (9) Other lengths up to 10 m on request  
 (10) 80% of energy, or 1 year, whichever comes first

## Laser head



## Integrated cooling & electronics

### Q-smart



VISIBLE AND INVISIBLE LASER RADIATION  
 AVOID EYE OR SKIN TO DIRECT  
 OR SCATTERED RADIATION.

CLASS 4 LASER RADIATION PRODUCT

Max Average Power : 20 W  
 Max Energy/pulse : 2J  
 Pulse duration : <20ns  
 Emitted Wavelength : 190/4000nm

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