# PEACOCK XT 355 (VIS-NIR)

Pulsed Nd:YAG and Optical Parametric Oscillator Integrated System



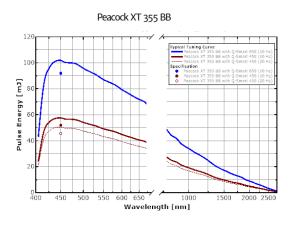


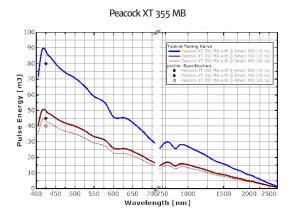
# **MAIN FEATURES**

- · 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

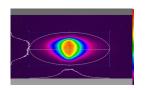
- MEDICAL & BIOTECHNOLOGY
- SPECTROSCOPY
- REMOTE SENSING
- PHOTOACOUSTIC IMAGING
- LiDAR

# **Typical tuning curve**

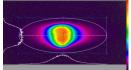




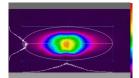
# **Typical beam profiles**



Peacock XT 355-MB @ 450 nm



Peacock XT 355-MB @ 550 nm



Peacock XT 355-MB @ 650 nm

www.quantel-laser.com

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



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# 06/23 - Lumibird reserves the right to modify the specifications without prior notice.

# PEACOCK XT 355 (VIS-NIR)

# Pulsed Nd:YAG and Optical Parametric Oscillator **Integrated System**

# **SPECIFICATIONS**

		Peacock XT 355					
		BB - 140		BB - 280	MB - 140		MB - 280
Wavelength (nm)	Signal	405 - 690			405 - 2850		
	Idler	730 - 2630					
Repetition rate (Hz) (1)		10	20	10	10	20	10
Peak energy (mJ)		52	45	90	45	40	80
Pulse duration (ns) (2)		< 5					
Beam diameter (mm) (3)		< 7		< 9.5	< 7		< 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) (2)		≈5					
Beam diameter (mm) (6)		≈ 6.5		≈ 9	≈ 6.5		≈ 9
Beam divergence (mrad) (7)		< 0.5					

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 (8)	- 10 °C to + 50 °C			
Cable length (m) (9)	3			
Flashlamps warranty (10)	100 million shots			

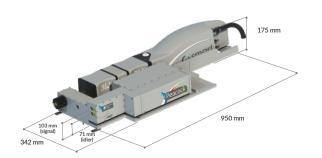
- (8) System rinsed and drained with ethylene glycol/water mixture
- (9) Other lengths up to 10 m on request
- (10) 80% of energy, or 1 year, whichever comes first

- (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/e² of the peak

## Laser head

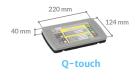
# **Integrated cooling & electronics**

Q-smart



# BLE 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





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