

# Peacock XT 355

## Integrated Tunable Laser-OPO System



The **Peacock XT 355** continues with our philosophy to **provide reliable and user-friendly tunable laser systems** for a wide range of applications. The Peacock XT provides **high energy nanosecond pulses** with continuous **VIS to IR wavelength coverage**. Our new and unique automated tuning offers **fast shot-to-shot wavelength switching** across the entire tuning range. **Energy measurement and attenuation** as well as **fiber-coupling** capability are integral parts of the Peacock XT series. Our robust all-solid-state technology provides intuitive features and interfaces that allow for easy **OEM machine integration** as well as for convenient usage in **research labs**. The rugged and turn-key design, paired with an intuitive GUI and programming interface, ensure convenient usability and best reliability.

The Peacock XT consists a 355 nm pumped **Laser-OPO package**, **seamlessly integrating** Quantel's Q-Smart 450 and Q-Smart 850 lasers. Nanosecond pulses with a **peak energy of up to 90 mJ** in the **405 nm to 2850 nm** wavelength range at 10 Hz or 20 Hz are available.

The PEACOCK series tunable Lasers are joint products of **GWU-Lasertechnik** and **Quantel Lasers by Lumibird**, combining decades of experience in Lasers and nonlinear optics.

### Peacock XT 355 Specification

Peacock XT 355						
	BB/450		BB/850	MB/450		MB/850
Repetition Rate [Hz]	10	20	10	10	20	10
Output Energy [mJ ] <sup>(1)</sup>	50	45	90	45	40	80
Beam Diameter at Exit Aperture [mm]	< 7		< 9.5	< 7		< 9.5
Tuning Range Signal Wave [nm]	405 – 680			405 - 2850		
Tuning Range Idler Wave [nm]	740 - 2630					
Linewidth	0.3 – 15 nm <sup>(2)</sup>			< 4.5 cm <sup>-1</sup>		
Divergence (hor. / vert.) <sup>(3)</sup>	< 8 mrad / < 10 mrad			< 6 mrad / < 1.5 mrad		
OPO Pulse Width	< 5 ns					

<sup>(1)</sup>: At 425 nm ± 10 nm

<sup>(2)</sup>:Depends on wavelength

<sup>(3)</sup>: Full angle, at FWHM

### Features and Benefits

- All integrated Laser-OPO platform
- Fast, shot-to-shot wavelength tuning
- Real-time OPO energy signals
- Fully automated for hands-free operation
- Fiber-delivery or free-space output
- Integrated wavelength measurement
- Soft pumping scheme for high reliability and long lifetime

### Applications

- Medical & Biotechnology
- Photoacoustic Imaging
- Spectroscopy
- Sensor Testing
- Remote Sensing
- LIDAR

### Notes

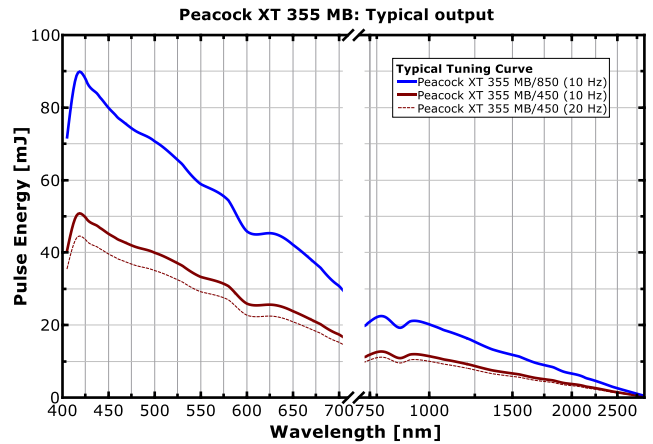
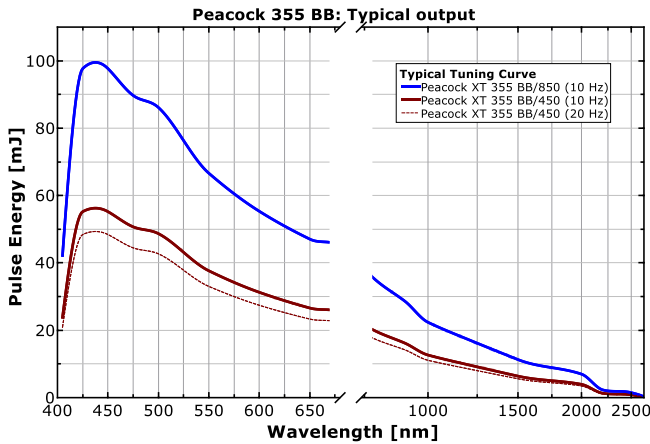
All specifications are subject to change without notice. The Peacock is a joint product of GWU-Lasertechnik and Quantel by Lumibird.



Scan Me!

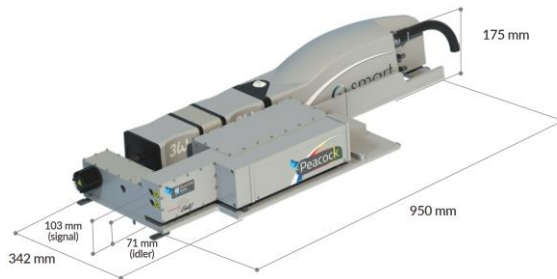
# Peacock XT 355 Performance

Typical performance, not a guaranteed or warranted specification

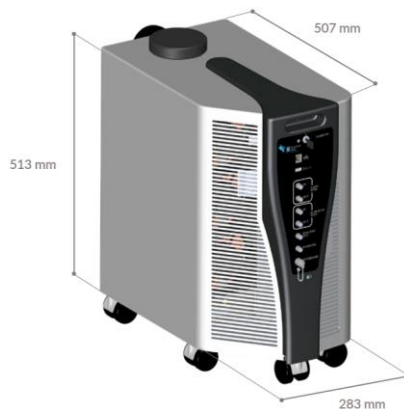


## Peacock Dimensions

### Laser Head



### Integrated Cooling & Electronics



## Mechanical + Utilities

Size OPO body  
(L x W x H):  
950 x 342 x 175 mm<sup>3</sup>

For dimensions with feet,  
and other protruding  
elements please refer to  
the dimensional drawing

Electric requirements:  
100-240 VAC, 50-60 Hz  
single phase

Cooling: water to air

Cable Length: 3 m

Flashlamp Warranty:  
100 million shots