

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/140		BB/280	MB/140		MB/280
Repetition Rate [Hz]	10	20	10	10	20	10
Output Energy [mJ] ⁽¹⁾	52	45	90	45	40	80
Beam Diameter at Exit Aperture [mm]	< 7		< 9.5	< 7		< 9.5
Tuning Range Signal Wave [nm]	405 – 690			405 - 2850		
Tuning Range Idler Wave [nm]	730 - 2630					
Linewidth	0.3 – 15 nm ⁽²⁾			< 4.5 cm ⁻¹		
Divergence (hor. / vert.) ⁽³⁾	< 8 mrad / < 10 mrad			< 6 mrad / < 1.5 mrad		
OPO Pulse Width	< 5 ns					

⁽¹⁾: At 425 nm

⁽²⁾: Depends on wavelength

⁽³⁾: 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
Remote Sensing
LIDAR

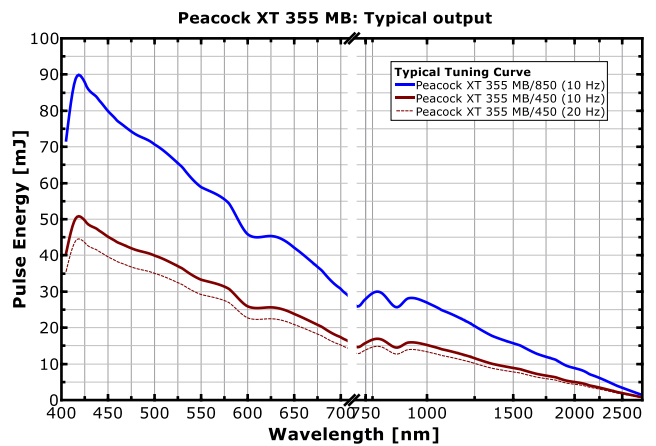
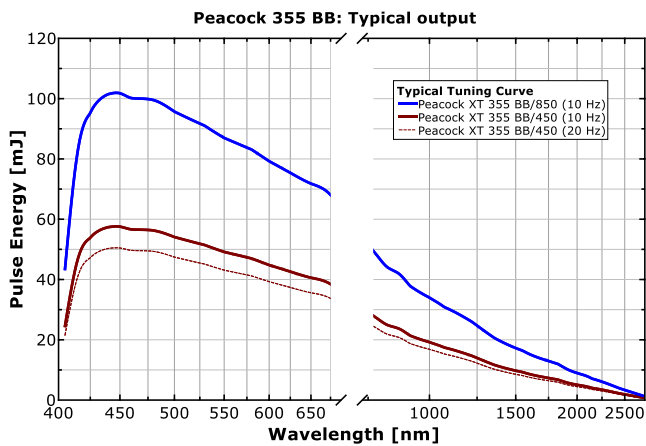
Notes

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



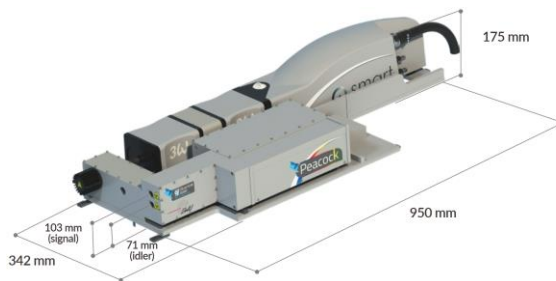
Peacock XT 355 Performance

Typical performance, not a guaranteed or warranted specification

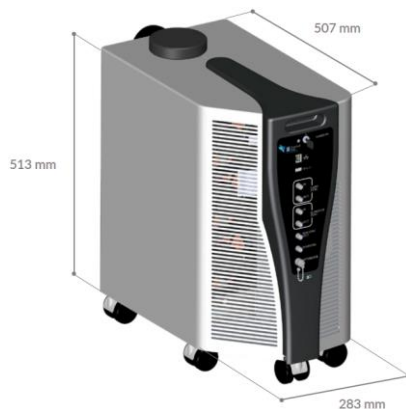


Peacock Dimensions

Laser Head



Integrated Cooling & Electronics



Mechanical + Utilities

Size OPO body
(L x W x H):
597 x 304 x 126 mm³

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