

Peacock XT 532

Integrated Tunable Laser-OPO System



The Peacock XT 532 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 NIR to Mid-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 532 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 120 mJ in the 660 nm to 2650 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 532 Specification

	Peacock XT 532					
	BB/230		BB/450	MB/230		MB/450
Repetition Rate [Hz]	10	20	10	10	20	10
Output Energy [mJ] ^(1,2)	58	42	115	60	53	120
Beam Diameter at Exit Aperture [mm]	< 7		< 9.5	< 7		< 9.5
Tuning Range Signal Wave [nm]	680 – 980			660 - 2650		
Tuning Range Idler Wave [nm]	1150 - 2200					
Linewidth at 725 nm ⁽³⁾	< 3 nm			< 12 cm ⁻¹		
Divergence (hor. / vert.) ⁽⁴⁾	< 10 mrad			< 10 mrad / < 2 mrad		
OPO Pulse Width	< 5 ns					

⁽¹⁾: BB at 725 nm, MB at 690 nm ⁽⁴⁾:Depends on wavelength

⁽⁴⁾: 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

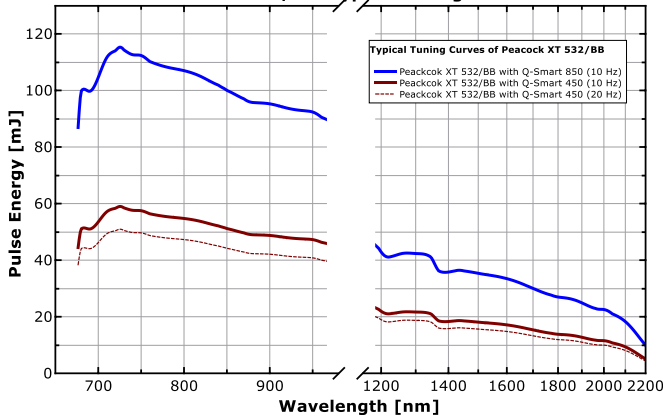
All specifications are subject to change without notice. The Peacock is a joint product of GWU-Lasertechnik and Quantel by Lumibird.



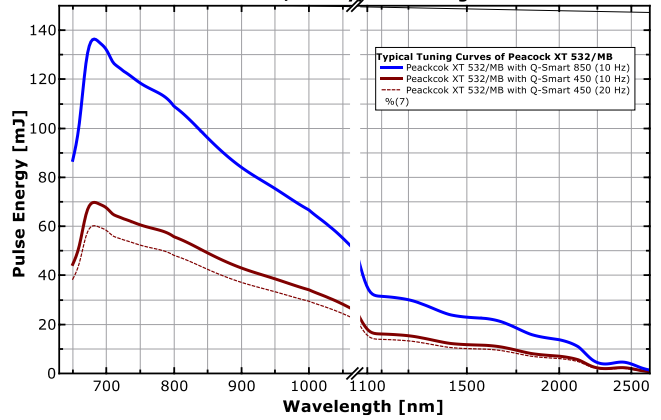
Peacock XT 532 Performance

Typical performance, not a guaranteed or warranted specification

Peacock XT 532/BB: Typical Tuning Curves

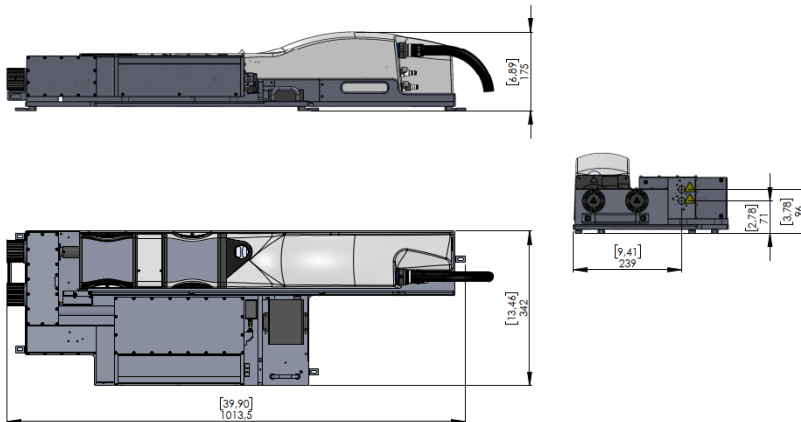


Peacock XT 532/MB: Typical Tuning Curves



Peacock XT 532 Dimensions

Laser Head



Integrated Cooling & Electronics



Mechanical + Utilities

Size OPO body
(L x W x H):
950 x 342 x 175 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

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