

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

PeacockXT 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

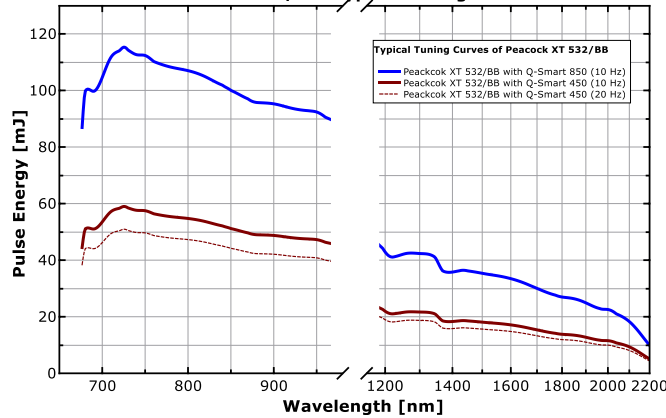
All specifications are subject to change without notice. The Peacock is a joint product of GWU-Lasertechnik and Quantel by Lumibird.



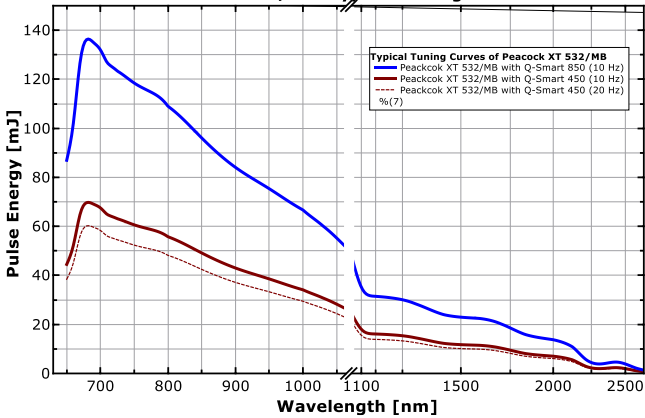
Peacock XT 532 Performance

Typical performance, not a guaranteed or warranted specification

Peacock XT 532/BB: Typical Tuning Curves

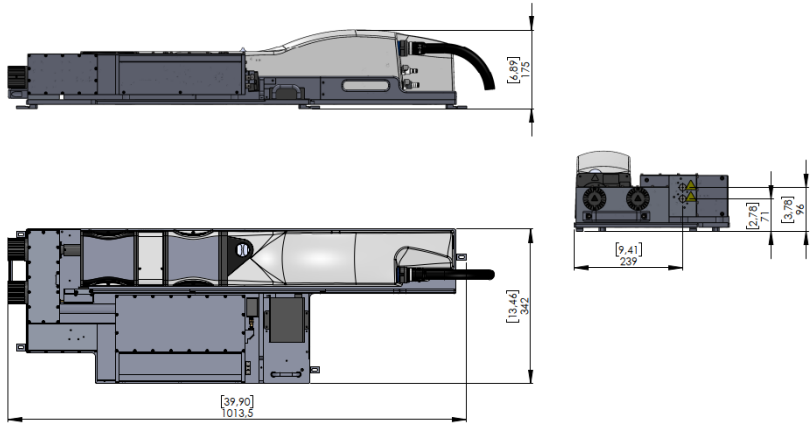


Peacock XT 532/MB: Typical Tuning Curves



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