

HG | PHAROS

Automated Harmonic Generators

FEATURES

- 515 nm, 343 nm, 257 nm, or 206 nm output
- Automated harmonic selection
- Mounted directly on the laser head
- Industrial-grade design



Harmonic generator attached to PHAROS

PHAROS lasers equipped with automated harmonic generators (HGs) provide a selection of fundamental (1030 nm), second (515 nm), third (343 nm), fourth (257 nm), or fifth (206 nm) harmonic outputs using software control.

HGs are perfect for industrial applications that require a single-wavelength output. Modules, mounted directly at the output of the laser, are fully integrated into the system.

SPECIFICATIONS

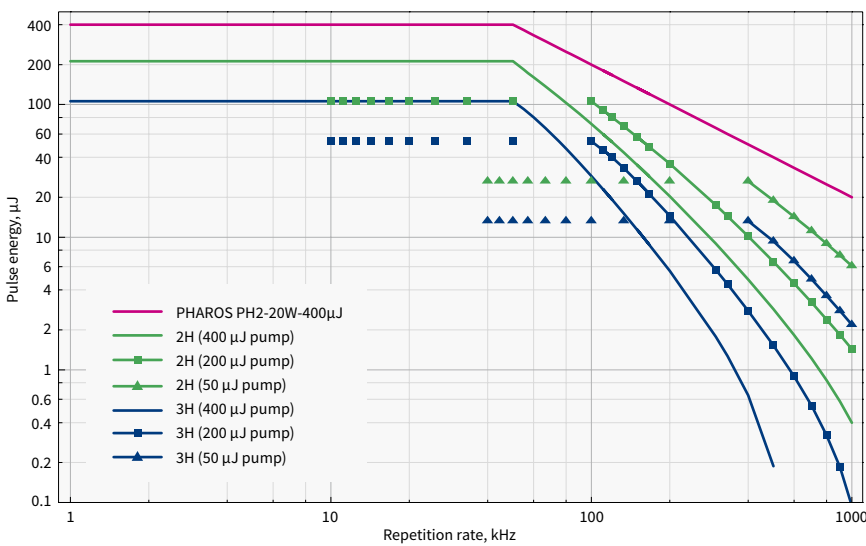
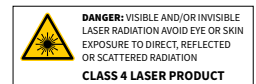
Model		2H (-HE)	2H-3H (-HE)	2H-4H (-HE)	4H-5H
Output wavelength ¹⁾ (automated selection)		1030 nm 515 nm	1030 nm 515 nm 343 nm	1030 nm 515 nm 257 nm	1030 nm 257 nm 206 nm
Pump pulse energy		20 – 2000 μJ	50 – 2000 μJ ²⁾	20 – 2000 μJ ²⁾	200 – 1000 μJ
Pump pulse duration		190 – 300 fs			
Conversion efficiency		> 50% (2H)	> 50% (2H) > 25% (3H)	> 50% (2H) > 10% (4H) ³⁾	> 10% (4H) ³⁾ > 5% (5H) ⁴⁾
Beam quality (M ²)	≤ 400 μJ pump	< 1.3 (2H), typical < 1.15	< 1.3 (2H), typical < 1.15 < 1.4 (3H), typical < 1.2	< 1.3 (2H), typical < 1.15 n/a (4H)	n/a
	> 400 μJ pump	< 1.4 (2H)	< 1.4 (2H) < 1.5 (3H)	< 1.4 (2H) n/a (4H)	

¹⁾ Depends on pump laser model.

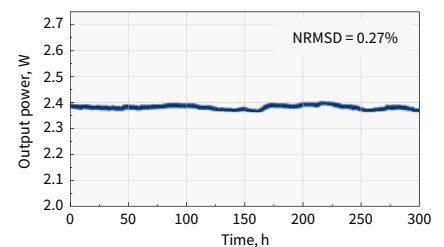
²⁾ High energy versions are available, contact sales@lightcon.com for specifications.

³⁾ Maximum output power of 1 W.

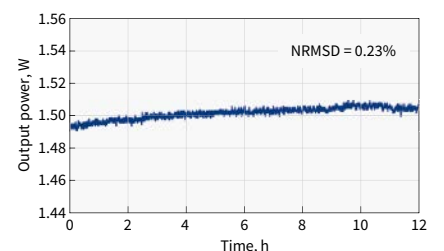
⁴⁾ Maximum output power of 0.15 W.



Pulse energy vs repetition rate of PHAROS with HG



3H output power stability



4H output power stability