

# HG | PHAROS

## Automated Harmonics Generators

### FEATURES

- 515 nm, 343 nm, 257 nm and 206 nm
- Output selection by software
- Mounts directly on a laser head and integrated into the system
- Rugged industrial grade mechanical design



Harmonics generator module attached to PHAROS

PHAROS laser can be equipped with automated harmonics modules. A selection of fundamental (1030 nm), second (515 nm), third (343 nm), fourth (257 nm) or fifth (206 nm) harmonic outputs are available through software control.

Harmonics generators are designed to be used in industrial applications where a single output wavelength is desired. Modules are mounted directly on the output of the laser and integrated into the system.

### SPECIFICATIONS

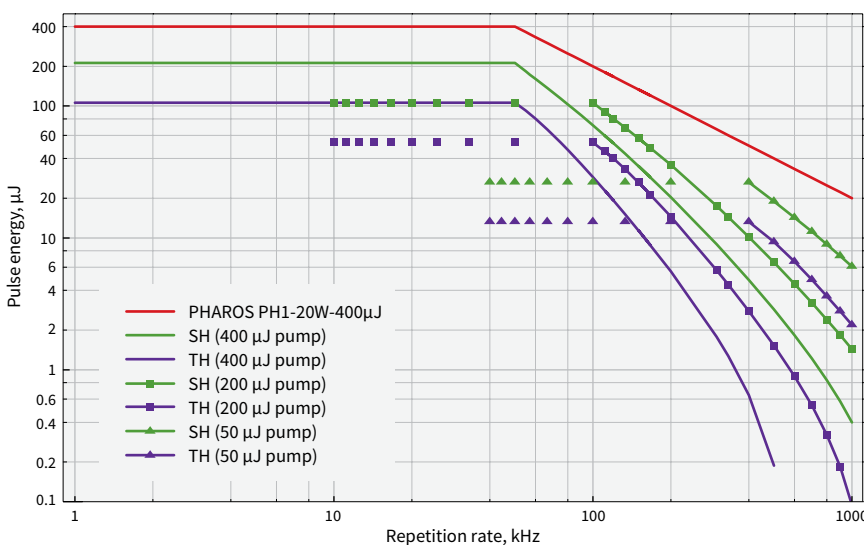
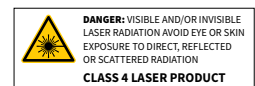
Model	2H	2H-3H	2H-4H	4H-5H
Output wavelength <sup>1)</sup> (automated selection)	1030 nm 515 nm	1030 nm 515 nm 343 nm	1030 nm 515 nm 257 nm	1030 nm 257 nm 206 nm
Input pulse energy	20 – 2000 μJ	50 – 2000 μJ <sup>2)</sup>	20 – 2000 μJ <sup>2)</sup>	200 – 1000 μJ
Pump pulse duration	190 – 300 fs			
Conversion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

<sup>1)</sup> Depends on pump laser model.

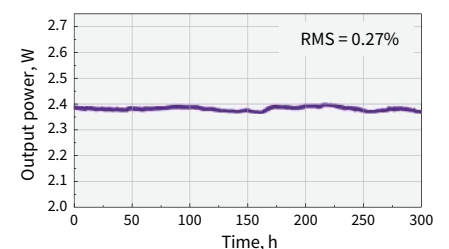
<sup>2)</sup> High energy versions are available, please contact Light Conversion for specifications.

<sup>3)</sup> Max 1 W output.

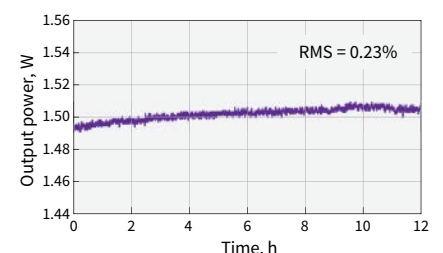
<sup>4)</sup> Max 0.15 W output.



PHAROS harmonics energy vs pulse repetition rate



3H output stability



4H output stability