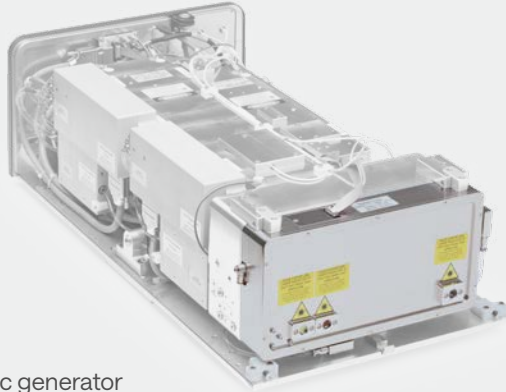


## Automated Harmonic Generators



PHAROS with a harmonic generator

515 nm, 343 nm, 257 nm,  
or 206 nm output

Automated harmonic selection

Industrial-grade design

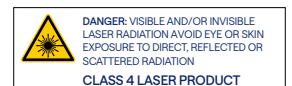
### Specifications

Model	2H (-HE)	2H-3H (-HE)	2H-4H (-HE)	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
Pump pulse energy	20 – 4000 $\mu$ J	50 – 4000 $\mu$ J	20 – 4000 $\mu$ J	200 – 1000 $\mu$ J
Pump pulse duration	100 – 500 fs			
Conversion efficiency	> 50% (2H)	> 50% (2H) > 25% (3H)	> 50% (2H) > 10% (4H) <sup>2)</sup>	> 10% (4H) <sup>2)</sup> > 5% (5H) <sup>3)</sup>
Beam quality, M <sup>2</sup> , typical values	$\leq$ 400 $\mu$ J pump	< 1.15 (2H)	< 1.15 (2H) < 1.2 (3H)	n/a
	> 400 $\mu$ J pump	< 1.2 (2H)	< 1.2 (2H) < 1.3 (3H)	

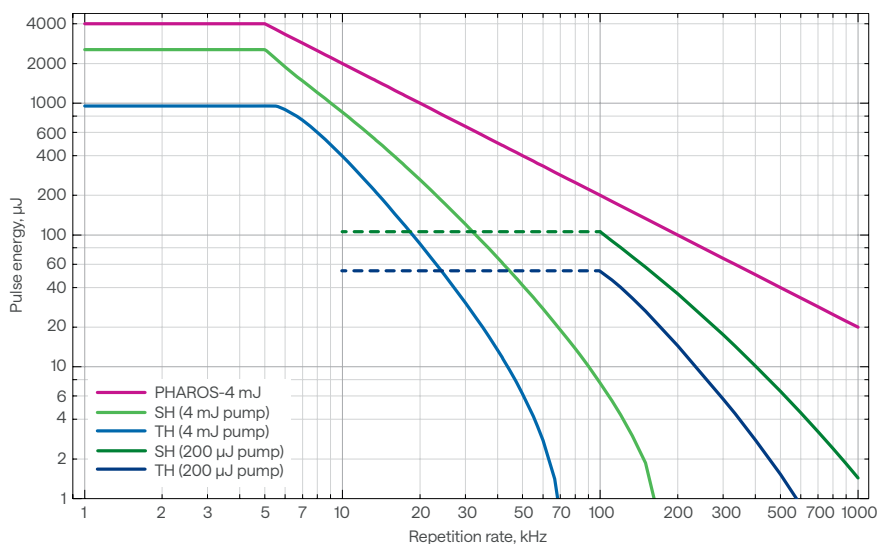
<sup>1)</sup> Depends on pump laser model.

<sup>2)</sup> Maximum output power of 2 W at 20 – 1000  $\mu$ J pump  
or 1 W at 1000 – 4000  $\mu$ J pump.

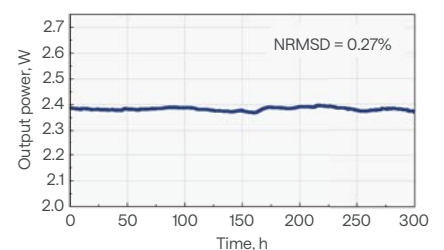
<sup>3)</sup> Maximum output power of 150 mW.



### PHAROS with HG pulse energy vs repetition rate



### 3H output power stability



### 4H output power stability

