HG | FLINT

Automated Second Harmonic Generator

FEATURES

- 515 nm output
- Automated harmonic selection
- Integrated into the system
- Industrial-grade design

FLINT-FL2 with integrated HG

FLINT oscillators equipped with an automated second harmonic generator (HG) provide a selection of fundamental (1H) or second harmonic (2H) outputs using software control. The HG is fully integrated into the industrial-grade system.

In case fundamental and second harmonic outputs are required simultaneously or higher harmonics are required, then HIRO harmonic generator is the solution.

SPECIFICATIONS

Model	FL2-SP	FL2			
Key feature	Short pulse	High power and high energy			
Pulse duration [1]	< 100 fs [2]	< 170 fs			
Repetition rate	76 MHz	11 MHz	20 MHz	40 MHz	76 MHz
Maximum 1H output power	2 W	7 W	12 W	20 W	20 W
2H generation efficiency	> 30%				
Center wavelength	520 ± 10 nm	515 ± 10 nm			513 ± 2 nm
Polarization	Linear, horizontal				
Beam quality	TEM_{00}; M^2 < 1.2				
Beam pointing stability	< 10 µrad/°C				
Pulse-to-pulse energy stability [3]	< 0.5% RMS deviation [4] over 24 h				
Long-term power stability [3]	< 0.5% RMS deviation [4] over 100 h				

PHYSICAL DIMENSIONS

Laser head (L × W × H)	542 × 322 × 146 mm
Power supply and chiller rack (L × W × H)	642 × 533 × 673 mm
Chiller	Different options available. Contact sales@lightcon.com

[1] *Models with shorter pulse duration available upon request*
[2] *Typical value.*
[3] *With enabled power-lock, under stable environmental conditions.*
[4] *Normalized to average pulse energy, NRMSD.*