FH HARMONIC GENERATOR FOR FEMTOSECOND LASERS

FEATURES

FH100 is a new series of free-standing harmonic generators for femtosecond oscillators.

Harmonic generator series FH is based on the customizable harmonic generator LG450 platform and can be adapted to your applications.

- 515 NM, 343 NM, AND 258 NM OUTPUTS
- SIMPLE SELECTION BETWEEN HARMONICS
- SIMULTANEOUS OR/AND SWITCHABLE OUTPUTS
- CUSTOMIZABLE FOR ADDITIONAL OPTIONS



DESCRIPTION

The FH100 series harmonic generators provide a high-efficiency second, third, and fourth harmonic generation at 515, 343, and 258 nm, respectively.







Here we present specifications for the standard models of harmonic generators. However, the FH100 series harmonics can be easily modified for your applications, for example, to arrange for simultaneous output of all harmonics radiation in parallel channels or in one channel.

SPECIFICATIONS

MODEL	FH120	FH130	FH140
Wavelength, nm	≈ 515	≈ 343	≈ 258
Conversion efficiency 1), %	≥ 35%	≥ 5%	≥ 1%
Polarization 2)	Linear, horizontal	Linear, vertical	Linear, vertical
Housing (L × W × H), mm		385 × 195 × 150	

- 1) Depends on pump laser model;
- 2) Orthogonal polarization is available on request.

Typical output parameters of the FH100 series harmonic generator with simultaneous output of all harmonics.

MODEL	FH130	
Pump	Femtosecond laser model FX200-5 (5W, 150fs)	
Wavelength, nm		
— 1030 nm	≥1.5	
— 515 nm	≥0.9	
— 343 nm	≥0.7	

MODEL	FH130		
Pump	Femtosecond laser model FX200-8 (8W, 150fs)		
Wavelength, nm			
— 1030 nm	≥3		
— 515 nm	≥1.5		
— 343 nm	≥1.0		

APPLICATIONS

- Ultrafast spectroscopy;
- Nonlinear spectroscopy;
- Multiphoton spectroscopy;
- Harmonic generation;
- Nonlinear optics.