

FAST FROG

FROG stands for Frequency Resolved Optical Gating. The Femto Easy Fast Frog product line provides reliable and compact single shot FROGs based on second harmonic generation. Key design features such as the wavefront division technique and the mini imaging spectrometer make the Fast Frog very easy to use and provide a high level of accuracy. Six models will be available to cover a broad spectral range and a broad pulse duration range from sub-5 fs to 5 ps. Two designs are available: one for long pulses relying mainly on transmission optics and one for ultrashort pulses which is completely achromatic. We also propose a wavelength accordable Fast FROG that combine a very broad spectral range with a high spectral resolution.



- Very easy to use
- Real time phase retrieval
- Single shot up to 200 kHz¹
- High level of accuracy
- No calibration necessary and no teaking necessary
- Sub-5 fs pulses
- Broad accessible spectral range²
- Achromatic and non-dispersive³

Models	FC 700	FC 400	FS 700	FS 400	PS 700	PS 400
Pulse duration range (fs)	5 - 150 fs	5 - 150 fs	10 - 300 fs	10 - 300 fs	50 - 1000 fs	50 - 1000 fs
Wavelength range (nm)	700 - 2000	450 - 2000	700 - 2000	450 - 2000	700 - 2000	450 - 2000
Input pulse repetition rate	From Hz to GHz					
Input pulse energy (nJ) single shot: 1 MHz: 100 MHz: 1 GHz	> 5000 > 100 > 1 > 0.250 (with low energy option)					
Input polarization	Any linear					
Detection	CMOS 12 bit	CCD 10 bit	CMOS 12 bit	CCD 10 bit	CMOS 12 bit	CCD 10 bit
PC interface	USB 3	USB 2	USB 3	USB 2	USB 3	USB 2
Beam height (mm)	83 - no limit					
Dimensions (mm)	160x320x90					

² The announced spectral range is the maximum bandwidth accessible in factory. Please let us know your requirements in terms of spectral window and spectral resolution to provide the best suitable device for your application.

³ The FC and FS models are non-dispersive and achromatic to achieve non-ambiguous phase retrieval.

© Femto Easy 2017. Product specifications are subject to change without prior notice.

¹ Multi-shot measurements for higher rep rate. It means that the Femto Easy FROGs are suitable for any rep rate but they can measure a pulse to pulse fluctuation accurately only under 200 kHz. The single shot capacity can be extended to 200 kHz with the synchronisation option.