ROC Autocorrelator

ROC stands for Row Optical Correlator. Based on an ultra compact and robust inline setup, the ROC allows the measurement of single-shot autocorrelation traces. Specifically designed to offer the easiest user experience, they cannot be misaligned and no calibration or tweaking is needed. Also, they are easily transportable. And yes, they are rock-solid! Besides those advantages, the ROC autocorrelators provide excellent technical performances and highly accurate measurements. The ROC autocorrelators are available for different wavelength ranges and several pulse durations.

ROC

Key features

- Ultra compact
- Installation and measurement in less than 2 minutes!
- Suitable for any repetiton rate (single shot acquisition up to 80 kHz[1])
- Input energy from few pJ to few mJ
- Spatially resolved measurements
- No calibration necessary
- Pulse duration measurement from 5 fs to 10 ps
- Broad available spectral range[2]

Models	FC	FS	PS1	PS3	PS5	PS10
Pulse Duration Range (fs)	5-150	20-500	50-1000	100-3500	150-5000	300-10000
Spectral Range (nm)	480-2100[2]					800-2100[2]
Shot to shot Measurement capacity	80 kHz with synchronization / 40 kHz without[1]					
Input pulse repetition rate	From Hz to GHz					
Input pulse energy[3] (nJ) Single shot: 1 MHz: 1 GHz:	Standard model > 1000 > 10 N.A		Low energy option > 10 > 0.5 > 0.05			
Input polarization	Linear horizontal or vertical					
Detection	CMOS 12 Bit - 3 Mpx - 72 dB					
PC interface	USB 3.1 or GigE[4]					
Beam height (mm)	30 - no limit					
Dimensions (mm)	55x56x265		55x56x195			

[1]Over 80 kHz, measurements are averaged over several shots. The number of shots depends on the laser repetition rate (ex: 4 shots for 200 kHz). Devices with higher shot to shot measurement capacity can be made upon request.

[2]6 wavelength options are available: 480 - 640 nm (B) / 500 - 800 nm (G) / 700 - 1200 nm (R) / 1000 - 1600 nm (IR1) / 1400 - 2100 nm (IR2) / 480 - 2100 nm (BB). The ranges B, G and BB require a UV option.

[3]Maximum average input power is 2.5 W, meaning that in most cases, the beam can be injected directly into the ROC.

[4]GigE available in option.

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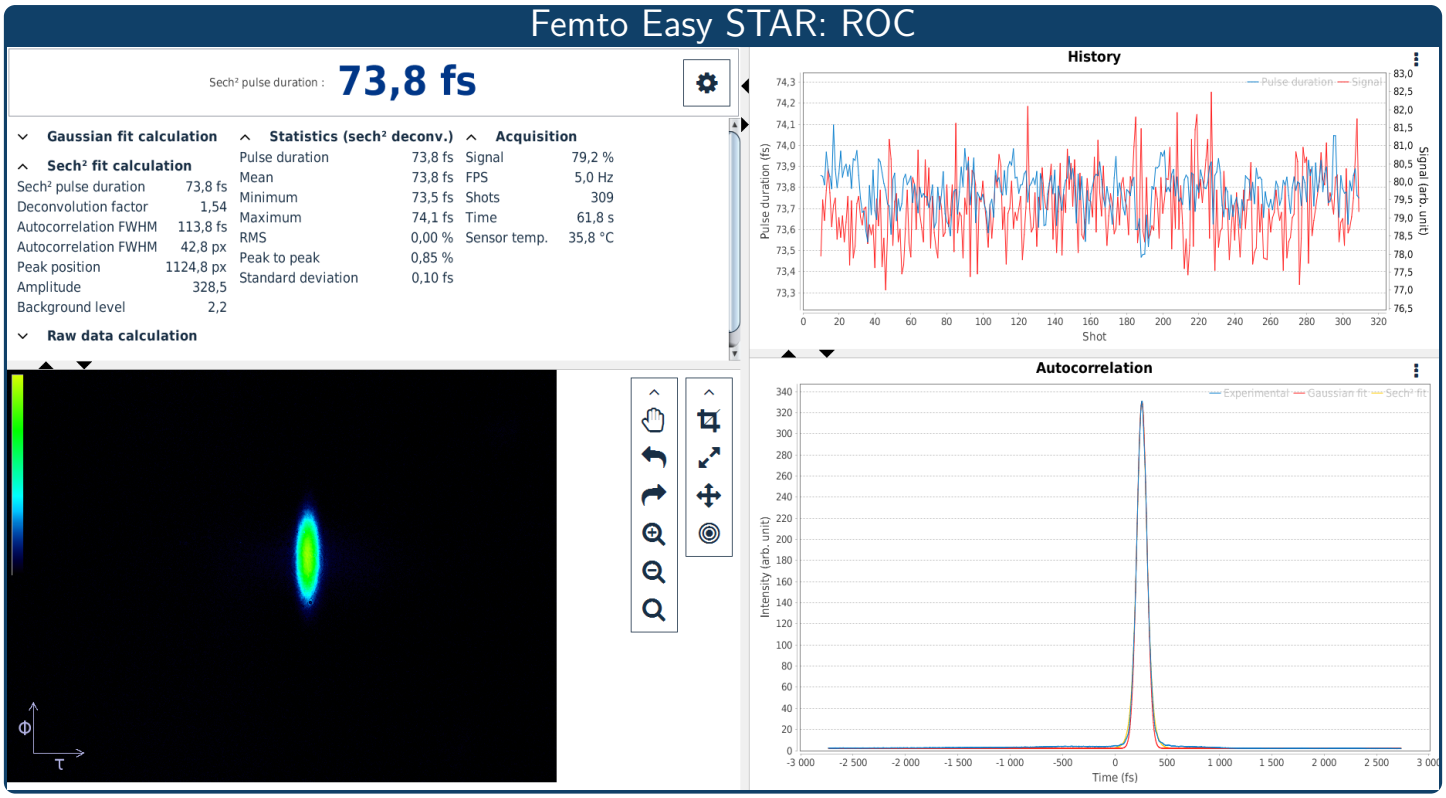
Femto Easy STAR: ROC



Software designed by users for users

- STAR stands for Software Technology for Acquisition and Retrieval.
- Live extraction of temporal profile and pulse duration.
- Different calculation methods are available for a proper pulse extraction (gaussian, sech^2, etc.).
- Enhanced background & hotspots treatment, for enhanced results.
- Client/Server interface, allowing remote control through network.
- All data are exportable into most common formats.