

ROC Autocorrelator

ROC stands for Row Optical Correlator. The ROC autocorrelators are ultra compact and robust single shot autocorrelators. As the name implies, they are designed specifically to be ultra easy to use and to align onto the laser beam. They cannot be misaligned, there is no need for calibration or tweaking and are easily transportable. And yes, they are rock-solid!

Besides those advantages, the ROCs autocorrelators provide excellent technical performances and highly accurate measurements. The ROCs autocorrelators are available for different wavelengths and several pulse durations.



- *Extreme ease of use*
- *Only 2 minutes to install and start measuring!*
- *Suitable for any rep rate*
- *Input energy from pJ to mJ*
- *Single shot acquisition up to 80 kHz¹*
- *Spatially resolved measurements*
- *No calibration necessary*
- *Down to 5 femtoseconds*
- *Broad available spectral range*
- *Ultra compact and transportable*

Models	FC	FS	PS1	PS3	PS5	PS10	
Pulse duration range (fs)	5 - 150	20 - 500	50 - 1000	150 - 3500	250 - 5000	300 - 10 000	* 6 wavelength options : - 450 - 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.
Wavelength range (nm)	480 - 2100*	480 - 2100*	480 - 2100*	480 - 2100*	480 - 2100*	800 - 2100*	
Input pulse repetition rate	From Hz to GHz						
Input pulse energy (nJ) ² single shot: 1 MHz: 1 GHz:	Standard model		With low energy option				
	> 1000		> 10				
	> 10		> 0.5				
	> 0.05		> 0.05				
Input polarization	linear vertical or horizontal						
Detection	CMOS 12 Bit - 3 Mpx - 72 dB						
PC interface	USB 3						
Beam height (mm)	30 - no limit						
Dimensions (mm)	55x56x265	55x56x265	55x56x195	55x56x195	55x56x195	55x56x195	

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

² The minimum average input power is 10 mW at 1 MHz. The maximum average input power is 2.5 W, it means that in most of the cases the beam can be injected directly into the ROC.