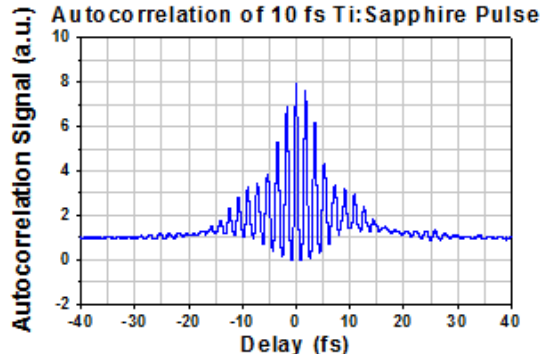
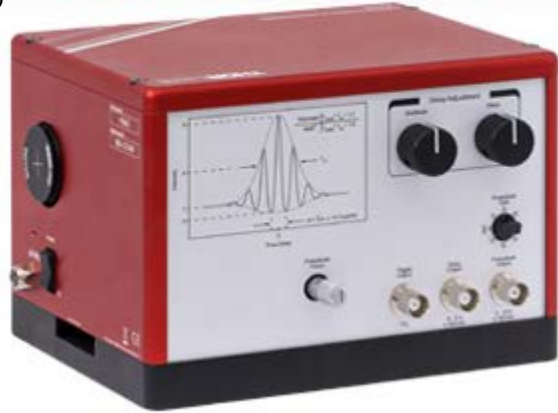


Autocorrelator for Femtosecond Lasers (# FSAC)

Ultrafast Interferometric Autocorrelations for 650 - 1100 nm
 User-Adjustable Scan Range from 50 fs to 10 ps
 Integrated Iris and Alignment Target for Easy Setup



Item #	FSAC	
Input Wavelength Range	650 - 1100 nm	
Input Pulse Duration	Without Precompensation	40 fs to 1 ps (FWHM)
	With Precompensation ^a	15 fs to 1 ps (FWHM)
Full Scan Range	50 fs to 10 ps (±25 fs to ±5 ps)	
Scan Rate	5 Hz	
Noise-Equivalent Sensitivity ^b	0.1 W ² at 800 nm for Ø1 mm Beam (1/e ²)	
Input Polarization	Horizontal	
Input Beam Diameter	<Ø4 mm (1/e ²)	
Input Repetition Rate ^c	>300 kHz	
Required Sampling Rate	>1.5 MHz for 10 ps Scan Range at 650 nm >150 kHz for 1 ps Scan Range at 650 nm	
Internal Dispersion	GDD	230 fs ² at 800 nm (Nominal)
	TOD	345 fs ³ at 800 nm (Nominal)
Maximum Average Input Power	150 mW	
Dimensions	6.90" x 5.53" x 4.82" (175.3 mm x 140.4 mm x 122.4 mm)	
Room Temperature Range	17 to 25 °C	

- Pulses as short as 15 fs may be measured by using dispersion-compensating optics such as Thorlabs' [Chirped Mirrors](#).
- Peak Power × Average Power of Input Laser
- Once the interferogram is obtained, lower input repetition rates may be used by triggering the oscilloscope directly from the autocorrelation signal.