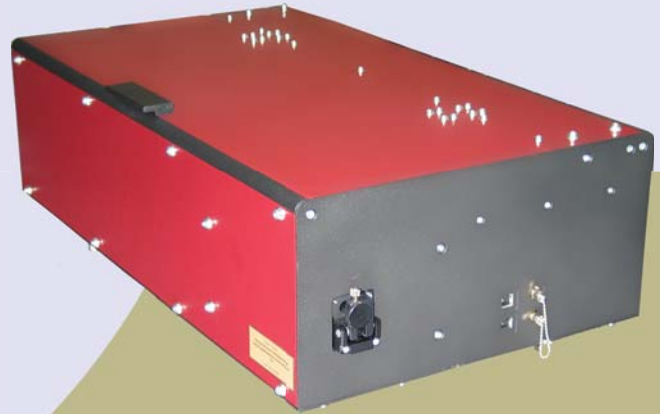


Diagnostics



SPIDER

- Down to 6 fs measurement
- Single-shot sensitivity 10 uJ
- Oscillator and amplifier measurement
- 650 to 1050 nm possible wavelengths
- USB PC connection and PC acquisition software



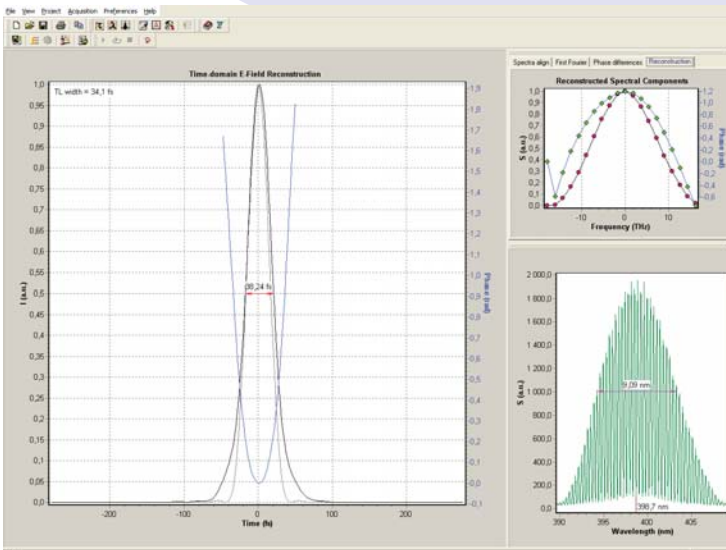
SPIDER

Product overview

While characterization of spectral intensity and spatial profile of an ultrafast laser source is rather straightforward in most cases, measurement of spectral phase requires a bit more complicated approach. One of the techniques widely used for this purpose is spectral phase interferometry for direct electric-field reconstruction (**SPIDER**). The principle of operation is based on spectral shearing interferometry. In a few words, the spectral phase property is reconstructed from a CCD-registered spectral interferogram, while the other CCD monitors spectral amplitude of the input pulse. The phase-amplitude characteristic in time domain is obtained by Fourier transformation phase-amplitude characteristic in frequency domain by using a linear and non-iterative reconstruction algorithm.

SPIDER technical specifications

	SP-30	SP-120	SP-7	SP-10/120
Wavelength range, nm	650-1050			
Pulse duration range, fs	8-32	30-120	6-22	10-120
Sensitivity	min. average power 100 mW at 100 MHz 0.01 mJ in single-shot mode			
Input pulses repetition rate	from 1 kHz to CW/single			
Input polarization, linear	horizontal			
Dimensions, mm	550 x 330 x 180			



Software screenshot