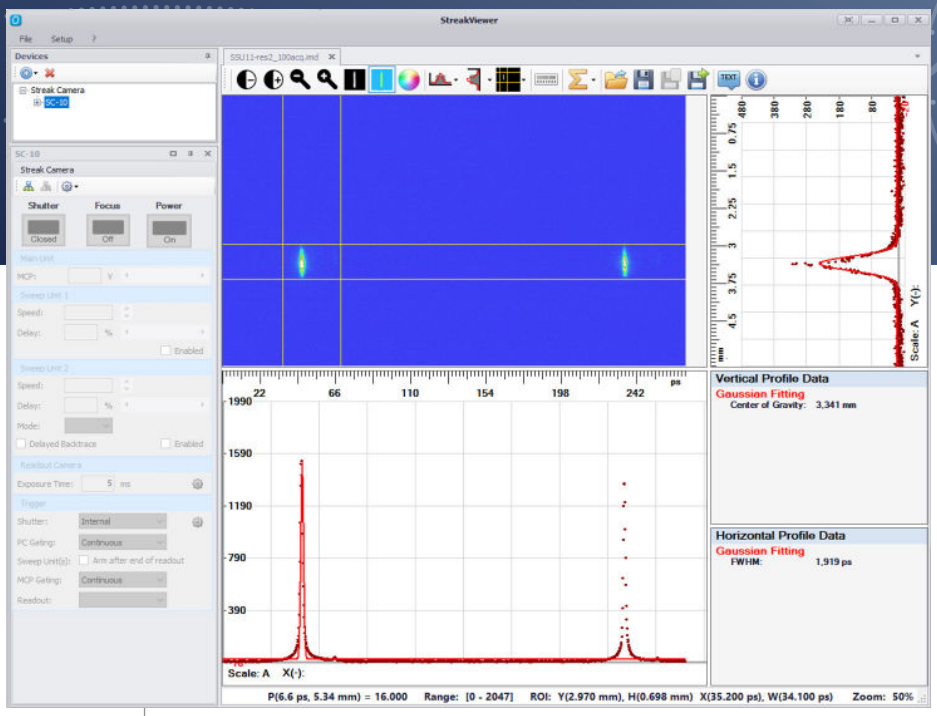
Optronis

Make time visible

Streak Camera Control and Data Acquisition Software

StreakViewer
StreakViewer/CI



- Streak camera control and real-time image display
- Image acquisition and signal analysis
- 32 bit image intensity coding
- Spectrometer and trigger timing control
- Control interface for high-level system integration (StreakViewer/CI)

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Software StreakViewer

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DESCRIPTION

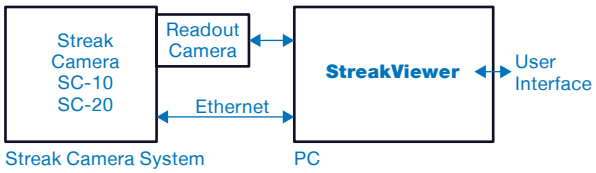
StreakViewer software provides an easy way to operate Optronis streak cameras SC-10, SC-20 and S3C-1i. The software is used to control settings of streak camera, readout camera as well as accessories like spectrometers or timing devices. Image real-time display and performant image acquisition modes to improve signal-to-noise ratio are implemented. Captured streak images are analyzed to extract temporal and spatial signal characteristics.

FEATURES

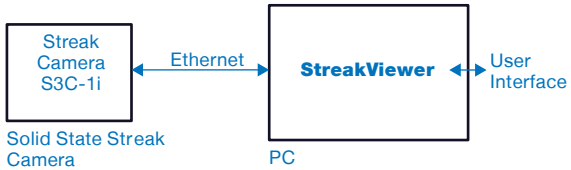
- Control of SC-10, SC-20 and S3C-1i streak camera systems
- Control and real-time image display
- Image acquisition in analogue or photon counting mode
- Real-Time photon counting with centre of gravity calculation
- Various image correction algorithms integrated
- Spectrometer control and wavelength calibration
- Gaussian and exponential decay-fitting in real time
- Automatic recording of captured images, profiles and pulse characteristics in sequence mode
- System configuration information saved as XML text file
- Drift and jitter correction

CONFIGURATION

StreakViewer software controls the streak system camera SC-10 and SC-20 via an Ethernet (TCP/IP) interface. Additionally, readout camera images are displayed and analyzed to extract signal characteristics. For SC-10 and SC-20 based systems a separate interface between the readout camera and the Windows PC is used.



For S3C-1 and S3C-1i systems only one Ethernet interface is used for control and image transfer.



CONTACT INFORMATION

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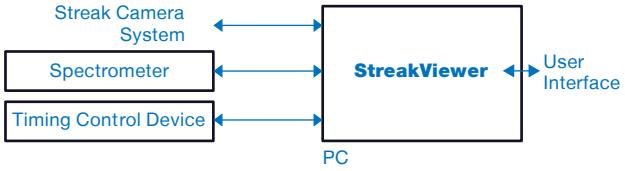
ACCESSORIES CONTROL

Accessories such as spectrometers and timing control devices can be controlled via StreakViewer software. By controlling the wavelength of the spectrometer and selecting the grating, the wavelength axis can be automatically calibrated on the captured images.

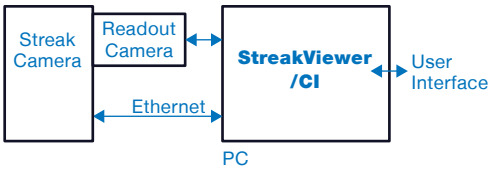


STREAKVIEWER/CI

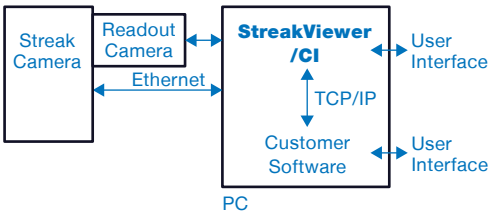
The StreakViewer/CI software is an extended version of StreakViewer. It additionally allows access to high level commands availabe in StreakViewer. This version is intended to simplify integration of streak systems into high-level control structures.
Communication with StreakViewer/CI is realized via the TCP/IP protocol either virtually on the same PC or physically via Ethernet with a remote PC. Particularly streak camera control and acquisition commands are supported. High-level customer software can access to acquired images and signal data.

STREAKVIEWER/CI - CONFIGURATIONS

StreakViewer/CI can be used with different software and hardware and configurations. Without using any customer software, StreakViewer/CI can be used the same way as StreakViewer.



A high-level control via customer software is possible on the same PC. Configuration below would apply.



For remote access to StreakViewer/CI, customer software can be operated on a remote PC.