SRU-ED / SRU-EU

High Performance Cameras

- Very low readout noise
- High speed 150 fps
- AD conversion 16 bit
- Resolution 1400 x 1052 pixel
- For SC-10 systems
- Interface CLHS (SRU-ED) / USB 3.0 (SRU-EU)
The SRU-ED and SRU-EU are very sensitive and fast readout units designed to be used with the OPTOSCOPE SC-10 streak camera. A high resolution 16 bit AD conversion is combined with an efficient coupling optics to capture weak light emissions. Streak camera systems operating in trigger mode or synchroscan mode take advantage of this. Due to the high readout rate the SRU-ED can be used for streak applications in single-shot mode with laser pulse rates up to 150 Hz. For lower readout rates or budget sensitive applications, the SRU-EU with USB interface can be used.

**ACQUISITION MODES**

The cameras can be used in continuous mode or in external trigger mode for perfect synchronisation to laser pulses. Rolling shutter mode provides lowest readout noise whereas global shutter mode simplifies single-shot readout. The SRU-EU provides a global reset mode instead of the global shutter mode.

**COUPLING OPTICS**

The camera is coupled to the streak camera screen by using high aperture coupling lenses. This allows sensitive image capture and data acquisition in photon counting mode. A manual focal adjustment is provided.

**PHOTON COUNTING**

Tiny scintillations related to a single photon are detected with signal intensity well above noise level. Scintillation position is defined by calculating the center of gravity. Using SRU-ED at high frame rate, photon counting mode operation extends to higher intensities without limitations due to saturation effects. This mode provides increased spatial and temporal system resolution. High sensitivity makes this camera an ideal tool for photon counting applications. Additionally, the noise of the readout camera and partly the intensifier noise is removed.

**TECHNICAL DRAWING**

**CONTACT INFORMATION**

Optronis GmbH  
Ludwigstraße 2  
77694 Kehl  
Germany  
Phone: +49 7851 91 26 - 0  
Fax: +49 7851 91 26 - 10  
info@optronis.com  
www.optronis.com

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