

SVCam-SLC

SVCam-SLC Series



Side Looking Gigabit Ethernet Cameras



A maximum of Hightech in a minimum body. This was our designing guideline for the SLC series. It was designed to offer an extreme performance: High-end Truesens sensors are featuring a broad dynamic range. A superb imaging performance with high frame rates meets a slim housing with „side-looking“ construction. You will find anywhere the space to install this camera to your application.

An excellent signal-to-noise ratio is guaranteed by Correlated Double Sampling (CDS) and 2 x 14 Bit A/D converters. This camera can be ordered in four different resolutions: From 1 or 2 Megapixel - over HD format - up to a 4 Megapixel version.

The internal logic allows different ways to adjust the exposure time and select trigger modes including:

- > Synchronization of image capture to an external event (trigger mode)
- > “Free running“ (with maximum frame rate)
- > Exposure time control via GigE interface or by trigger pulse width
- > Longer exposure times up to 8 minutes under low light level conditions

The family concept of SVCam series (see also separate datasheets) allows to upgrade systems in order to meet new specific requirements.

GEN*i*CAM

GiGE
VISION

Technical Highlights/Technical Data

- > Progressive Scan technology
- > Resolution: 1024 x 1024, 1600 x 1200, 1920 x 1080 and 2336 x 1752 pixel
- > Synchronization:
 - “Free running“ (frame rate adjustable)
 - External trigger with internal exposure control
 - External trigger with pulse width exposure control
 - Software trigger via PC
- > Monochrome and color sensors (Bayer Pattern)
- > Up to 12 Bit video data stream (14 Bit ADC per tap)
- > Adjustable gain
- > Internal Memory: 64 MB RAM / 8 MB Flash
- > Low offset
- > 2 x 2 binning mode
- > Area of Interest mode for higher frame rates
- > Standard C-Mount
- > 90° looking construction
- > 10V - 25V DC @ approx. 400 mA consumption (12V)
- > Operating temperature range: -10°C to +45°C
- > Full 2 years warranty

Overview

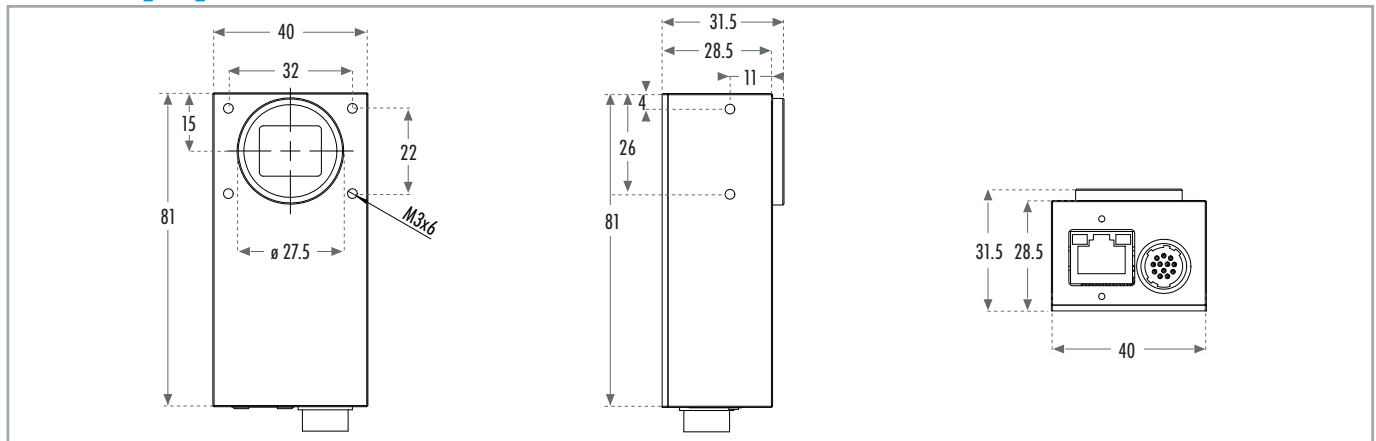
SVCam-SLC

Camera Type	slc1050XTLGEC	slc2050XTLGEC	slc2150XTLGEC	slc4050XTLGEC
Resolution	1024 x 1024	1600 x 1200	1920 x 1080	2336 x 1752
Frame Rate (Hz, max.)	51	31	31	16
Pixel (μm^2)	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5
CCD-Size Equivalent	7.96 mm diag., 1/2"	11 mm diag., 2/3" (4:3)	12.1 mm diag., 2/3" (16:9)	1"
Exposure Time internal	6 μs - 2 s	48 μs - 8 s	48 μs - 8 s	90 μs - 6 s
Exposure Time external	6 μs - ∞	80 μs - ∞	80 μs - ∞	100 μs - ∞

X = Monochrome, X = Color

Cameras make use of high performance CCD made by **TrueSense Imaging, Inc.**®, formerly **Kodak** (USA). For more camera types see our SVCam-CF, EVO, ECO or HR product overview.

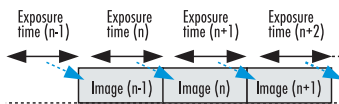
Dimensions [mm]



Operation Modes

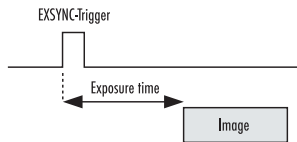
Free Running/Fixed Frequency

In this mode the camera creates all sync signals itself. Camera is connected to PC and will create images immediately.



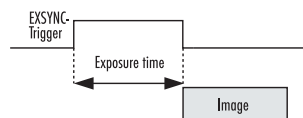
External Trigger, Internal Exposure Control

The camera needs an external trigger to output images. The exposure time is set by the internal logic inside the camera.



External Trigger, External Exposure Control

The camera needs an external trigger to output images. The exposure time is determined by the pulse width of the trigger signal and can be changed from frame to frame.

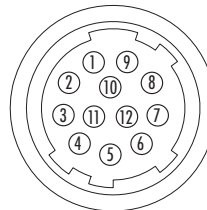


Software Trigger (GigE only)

The PC sends a command to the camera in order to get data. Internal logic is set for the exposure time. Jitter must be observed.

Connector Pin-out

HR10A-10R-12PB (mating connector HR10A-10P-12S)



- | | |
|------------------------|------------------------------------|
| 1 VIN- (GND) | 7 OUT1 (open drain max. 24V, 0.3A) |
| 2 VIN+ (10V to 25V DC) | 8 OUT2 (open drain max. 24V, 0.3A) |
| 3 RXD (RS232) | 9 IN3+ (RS422) |
| 4 TXD (RS232) | 10 IN3- (RS422) |
| 5 IN1 (0-24V) | 11 OUT3+ (RS422) |
| 6 IN2 (0-24V) | 12 OUT3- (RS422) |

Configuration Software

The SVCam cameras come with our "SVCapture"-software, which allows easy interactive setup of all camera parameters. The program runs under Windows XP/7 but also 64 Bit mode. Linux is supported as well. A XML file compliant with the GenICam standard is supplied with the camera. The free SDK and API coming with the camera allows easy integration into an application without involving a frame grabber.

Ordering Guide

Monochrome:	Color:	
slc1050MTLGEC	slc1050CTLGEC	(max. 51 Hz)
slc2050MTLGEC	slc2050CTLGEC	(max. 31 Hz)
slc2150MTLGEC	slc2150CTLGEC	(max. 31 Hz)
slc4050MTLGEC	slc4050CTLGEC	(max. 16 Hz)

