

SVCam-svs340

SVCam-CF Line

Compact VGA Resolution Camera



This digital Machine Vision camera has a resolution of 640 x 480 pixel. An ultra high frame rate of e.g. 400 fps (CP) is available at full resolution. The CCD is read out via 2 taps. So high Frame rates at an excellent signal to noise ratio are provided in a small housing.

Correlated Double Sampling (CDS, a noise reduction method) and 4 x 14 bit A/D Converters guarantee an excellent signal to noise ratio.

The internal micro-controller 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 serial interface or by trigger pulse width
- > Longer exposure times under low light level conditions

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

GEN<i>i>CAM

GiGE[™]
VISION

CAMERA
Link

Technical Highlights / Technical Data

- | | |
|---|---|
| <ul style="list-style-type: none"> > Progressive scan technology > Resolution: 640 x 480 pixel > Synchronization: <ul style="list-style-type: none"> · "Free running" (frame rate adjustable) · External trigger with internal exposure control · External trigger with pulse width exposure control > Monochrome and color sensors (Bayer Pattern) > Up to 12 Bit video data stream (14 Bit ADC per tap) | <ul style="list-style-type: none"> > Adjustable gain > Low offset > 2 x 2 binning mode > Partial scan mode for higher frame rates > Standard C-Mount > 12V DC @ approx. 600mA consumption > Operating temperature range: -10°C to +45°C > Full 2 years warranty |
|---|---|

Overview

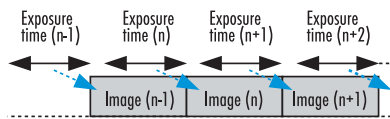
| SVCam-svs340 | GigE Version | CameraLink Versions | |
|----------------------------------|-----------------------|-----------------------|-----------------------|
| Camera Type | svs340XUGE | svs340XUCP | svs340XTRCPC |
| Resolution | 640 x 480* | 640 x 480* | 640 x 480** |
| Frame Rate (Hz @640 x 480 pixel) | 264 | 250 | 400 |
| Frame Rate (Hz @228 x 164 pixel) | - | 1720 | - |
| Frame Rate (Hz @640 x 164 pixel) | - | 728 | - |
| Pixel (μm^2) | 7.4 x 7.4 | 7.4 x 7.4 | 7.4 x 7.4 |
| CCD-Size Equivalent | 1/3" | 1/3" | 1/3" |
| Exposure Time internal | 15 μs - 2s | 30 μs - 2s | 58 μs - 8s |
| Exposure Time external | 40 μs - oo | 20 μs - oo | 58 μs - oo |

X = Monochrome, X = Color
 *Ultra high speed(2 x 50MHz) **2 x 80MHz
 For more camera types see our SVCam-CF product overview.

Operation Modes

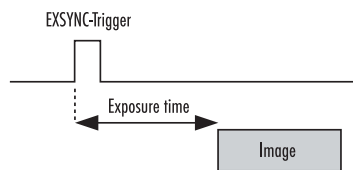
Mode: Free Running/Fixed Frequency

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



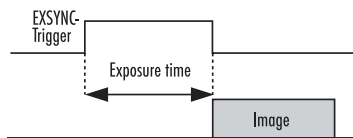
Mode: External Trigger, Internal Exposure Control

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



Mode: 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.



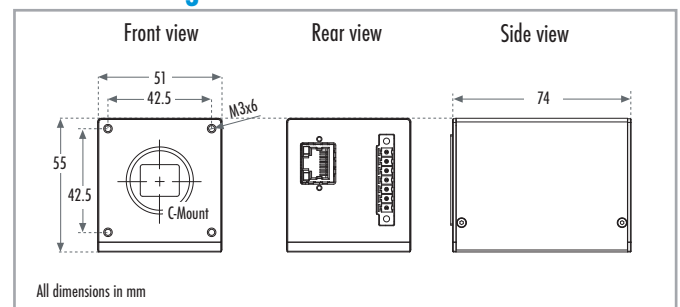
Mode: Software Trigger

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.

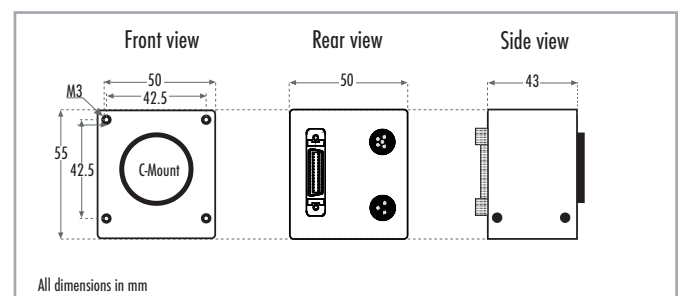
Configuration Software

The SVCam cameras come with our "SVCapture"-software, which allows easy interactive setup of all camera parameters. The software including a SDK supports Windows XP including 64 Bit operating system. A LINUX Driver is also available. The camera can be configured using the XML File stored inside the camera. This complies also with the international GenICam standard.

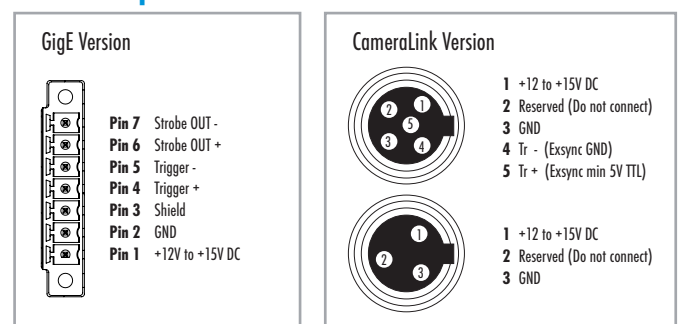
Dimensions GigE Version



Dimensions CameraLink Version



Connector pin-out



Ordering Guide

| Monochrome: | Color: | |
|--------------|-------------|---------------|
| svs340MUGE | svs340CUGE | (max. 264 Hz) |
| svs340MUCP | svs340CUCP | (max. 250 Hz) |
| svs340MTRCPC | svs340CTRCP | (max. 400 Hz) |

