

SVCam-svs29050

SVCam-HR Line

Compact 29 Megapixel Camera

Pre-liminary



A highend resolution of 6.576 x 4.576 pixel makes this digital Machine Vision camera „best in class“. Combined with Kodak 4-Tap Technology it is a real masterpiece of German Engineering.

Correlated Double Sampling (CDS) and 4 x 14 Bit A/D converters guarantee an excellent signal-to-noise ratio.

The internal logic allows different ways to adjust 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 up to under low light level conditions

GigE
VISION

GEN<i>CAM

Technical Highlights/Technical Data

- > Progressive Scan technology
- > Resolution: 6.576 x 4.576 pixel
- > Synchronization:
 - “Free running” (frame rate adjustable)
 - External trigger with internal exposure control
 - External trigger with pulse width exposure control
 - Software trigger via PC
- > Housing dimensions: 70 mm x 71 mm x 52.5 mm
- > Monochrome and color sensors (Bayer Pattern)
- > 8 or 12 Bit (using 14 Bit ADC)
- > 256 MB Memory inside
- > Internal LUT operations
- > Internal flat-field correction planned
- > Adjustable gain
- > Low offset
- > Binning mode
- > Area of Interest (AOI) (GigE Version)
- > M58 x 0.75 Mount (optional F-Mount adapter)
- > 10 - 25 V DC
- > Broad voltage input possible (+10V to +30V DC)
- > Operating temperature range: -10°C to +45°C
- > Full 2 years warranty



Scale your vision.

Overview

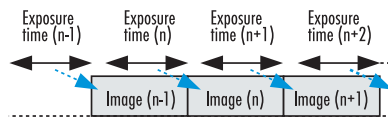
SVCam-svs29050	GigE Version
Camera Type	svs29050XFLGEC*
Resolution	6.576 x 4.576
Frame Rate (Hz, max.)	5
Pixel (μm^2)	5.5 x 5.5
CCD-Size Equivalent	43.47 mm diag.
Exposure Time internal	130 μs - 2 s
Exposure Time external	130 μs - ∞

* Preliminary X = Monochrome, X = Color For more camera types see our SVCam-HR product overview.

Operation Modes

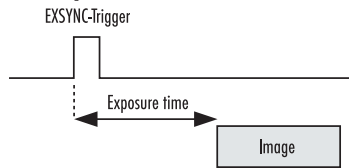
Mode: Free Running/Fixed Frequency

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



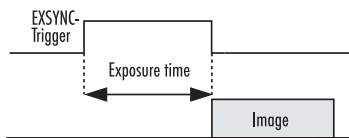
Mode: External Trigger, Internal Exposure Control

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

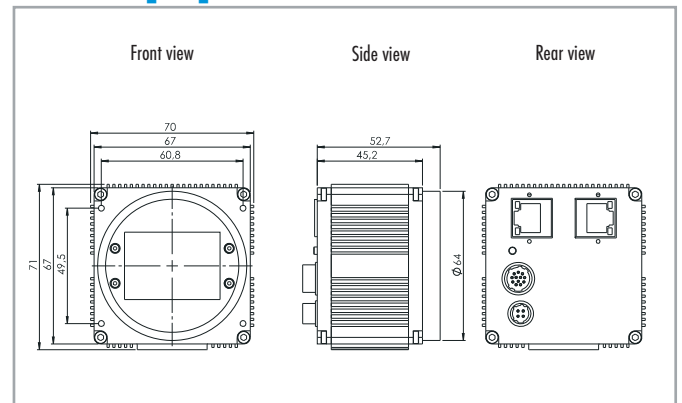
The camera needs an external trigger to output images. The exposure time is determined by the pulse width of the trigger signal and can be changed from frame to frame.



Mode: Software Trigger (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.

Dimensions [mm]



Connector pin-out

	1 VIN- (GND)	7 OUT1 (TTL Level)
	2 VIN+ (10V to 25V DC)	8 OUT2 (TTL Level)
	3 RXD (RS232 Level)	9 IN3+ (RS422 Level)
	4 TXD (RS232 Level)	10 IN3- (RS422 Level)
	5 IN1 (TTL Level)	11 OUT3+ (RS422 Level)
	6 IN2 (TTL Level)	12 OUT3- (RS422 Level)

	1 VIN+ (10V to 25V DC)
	2 VIN- (GND)
	3 IN0 (TTL Level)
	4 OUT0 (TTL Level)

Ordering Guide

Monochrome: **svs29050MFLGEC** Color: **svs29050CFLGEC** (max. 5 Hz)

Option: M58 to F-Mount adapter

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.

