

SVCam-EVO

SVCam-EVO Line

Dual GigE Camera in 1, 2, 4 and 8 MegaPixel Versions

Pre-liminary



The camera is designed to reach high frame rates due to high speed dual GigE (2 Gigabit). It is enclosed in a very compact housing.

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

The internal FPGA 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 Remote 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.

GigE[™]
VISION

GEN<i>CAM

Technical Highlights/Technical Data

- > Progressive Scan 4-Tap CCD sensors
- > Monochrome and color sensors (Bayer Pattern)
- > Various trigger (int./ext./free running) and exposure modes
- > Adjustable gain
- > Low offset
- > Various binning modes
- > C-Mount
- > Operating temp. range: -10°C (non condensing) to +45°C
- > Power supply: 10 - 25 V DC
- > Gig-E Vision (Gigabit Ethernet) standard compliant
- > DualGigE-Vision interface with max. 240 MB/s Datarate
- > Analog Digital Converter (ADC) 14 Bits
- > Optional 8 or 12 Bits transferred
- > Area of Interest (AOI)
- > White Balance for Color Versions
- > Isolated I/O-Concept: 2 x Input (0 - 24 V), 1 x Input RS-422, 2 x Output (24V, 0,3A), 1 x Output RS-422, 1 x Serial RS-232
- > Sequence Shutter and enhanced Strobe Functionality
- > Prepared for Lens- and Pan/Tilt Unit Control
- > SDK for Windows XP/7 (32/64 Bit) and Linux available
- > Selectable data rate up to 65 Mhz per Tap
- > Outstanding frame rates possible
- > SW-Config. tool to control the camera via frame grabber interface

Overview

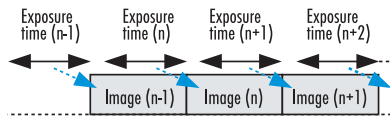
SVCam-EVO		GigE Versions*								
Camera Type	evo1050XFLGEA	evo2050XFLGEA	evo2150XFLGEA	evo4050XFLGEA	evo8050XFLGEA	evo1050XFLGEC	evo2050XFLGEC	evo2150XFLGEC	evo4050XFLGEC	evo8050XFLGEC
Resolution	1.024 x 1.024	1.600 x 1.200	1.920x 1.080	2.336x 1.752	3.320 x 2.496	1.024 x 1.024	1.600 x 1.200	1.920x 1.080	2.336x 1.752	3.320x 2.496
Frame Rate	150	85	80	40	21	120	68	64	32	17
Pixel (μm^2)	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5	5.5 x 5.5
CCD-Size	1/2"	2/3"	2/3"	1"	22.66 mm	1/2"	2/3"	2/3"	1"	22.66 mm
Exposure Time	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s	6 μs - 2 s
Exposure Time	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞	6 μs - ∞

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

Operation Modes

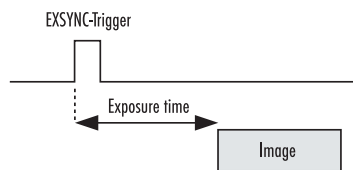
Mode: Free Running/Fixed Frequency

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



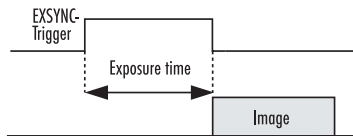
Mode: External Trigger, Internal Exposure Control

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.



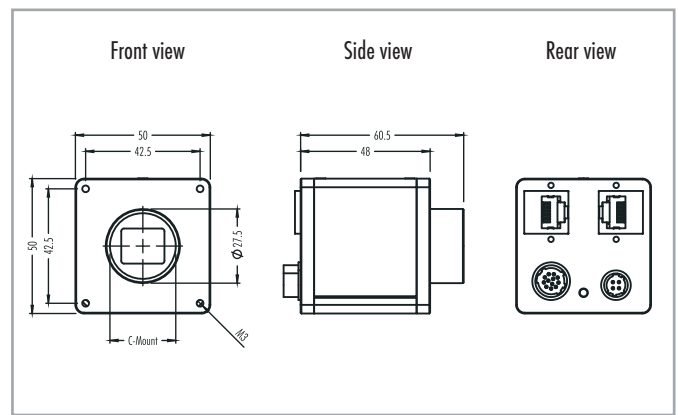
Mode: Software Trigger

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.

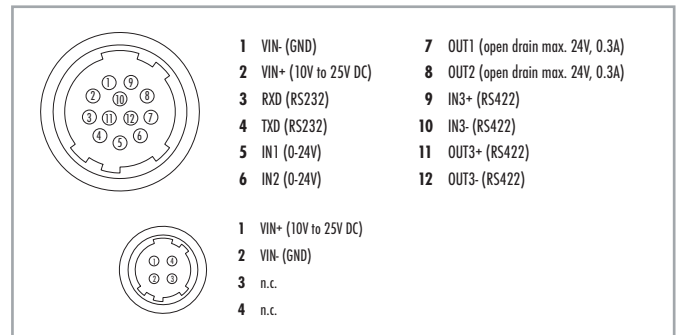
Configuration Software

The SVCam cameras come with our SVCapture (for GigE type) or ConvCam software (for CL type, respectively), it allows easy interactive setup of all camera parameters. The software including a SDK (GigE) or DLL (CL) supports Windows XP and Windows 7 including 64 Bit operating system. A LINUX Driver is also available (GigE only). The camera can be configured using the XML file stored inside the camera (GigE). This complies also with the international GenICam standard.

Dimensions [mm]



Connector pin-out



Ordering Guide

Monochrome:	Color:	
evo1050MFLGEA	evo1050CFLGEA	(max. 150 Hz)
evo2050MFLGEA	evo2050CFLGEA	(max. 85 Hz)
evo2150MFLGEA	evo2150CFLGEA	(max. 80 Hz)
evo4050MFLGEA	evo4050CFLGEA	(max. 40 Hz)
evo8050MFLGEA	evo8050CFLGEA	(max. 21 Hz)
evo1050MFLGEC	evo1050CFLGEC	(max. 120 Hz)
evo2050MFLGEC	evo2050CFLGEC	(max. 68 Hz)
evo2150MFLGEC	evo2150CFLGEC	(max. 64 Hz)
evo4050MFLGEC	evo4050CFLGEC	(max. 32 Hz)
evo8050MFLGEC	evo8050CFLGEC	(max. 17 Hz)

