

Compact 2-Megapixel Camera



This digital Machine Vision camera has a resolution of 1600 x 1200 pixel. The camera is designed to reach high frame rates at an excellent signal-to-noise ratio and is enclosed in a small housing.

Unique processing of the analogue CCD-signal using Correlated Double Sampling (CDS, a noise reduction method) and digital signal conversion, guarantees an excellent signal-to-noise ratio.

The internal micro-controller allows different ways to adjust exposure time and select trigger modes including:

- Synchronisation 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 10 sec under low light level conditions

The camera is available with CameraLink (CP) or GigE Vision (GE) interface.



- Progressive scan technology
- Area of interest (AOI) for GigE version
- Resolution: 1600 x 1200 pixel
- Synchronization:
 - "free running" (frame rate adjustable)
 - external trigger with internal exposure control
 - external trigger with pulse width exposure control
- Housing dimensions: e.g. 50mm x 55mm x 35mm (CP)
- Monochrome and color sensors (Bayer Pattern)
- 12 Bit video data stream (14 Bit ADC used)
- S/N ratio > 60 dB
- Adjustable gain
- Low offset
- 2 x 2 binning mode (GigE)
- 12-8 Bit LUT
- White balance (GigE, color)
- Partial scan mode for higher frame rates (CP)
- Standard C-Mount
- 12V DC @ approx. 350mA (CP) and 500mA (GigE) consumption
- Operating temperature range: -10°C to +40°C
- Full 2 years warranty

SVCam-svs274



Camera Types:

Camera Type	svs274XUCP	svs274XUGE*
Resolution	1600 x 1200	1600 x 1200
Frame Rate (Hz, max.)	25	26
Pixel (μm^2)	4.4 x 4.4	4.4 x 4.4
Exposure Time internal	50 μs - 8 min	40 μs - 2 s
Exposure Time external	20 μs - oo	40 μs - oo
CCD-Size Equivalent	1/1.8"	1/1.8"

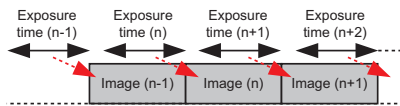
x = Monochrome
x = Color

*High speed with 1 x 65 MHz

Operation Modes:

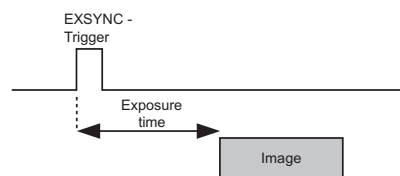
Mode: Free Running

In this mode the camera creates all sync signals itself. The frame rate is at its maximum and there is no need to trigger the camera (by EXSYNC) in order to get data. Exposure time can be set by using the serial CameraLink interface of any PC. The enclosed software allows the user to set the specified values. Exposure time can be changed "on the fly" during image acquisition. The time set stays resident after power off.



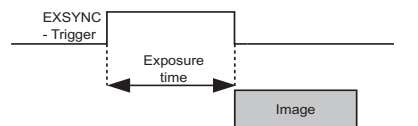
Mode: External Trigger, Internal Exposure Control

In this mode the camera starts image acquisition after an external trigger event. The exposure time is controlled by the camera. The value for the exposure time is entered via serial interface over the frame grabber CameraLink connection. The trigger signal is fed through the frame grabber or directly connected to the camera.



Mode: External Trigger, External Exposure Control

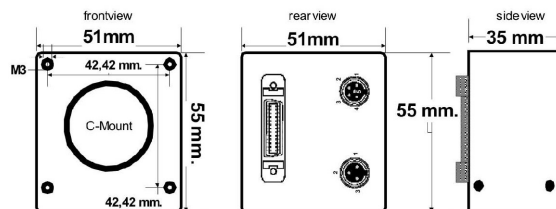
In this mode the camera is waiting for an external trigger which starts integration and read out. Exposure time can be varied using the length of the EXSYNC pulse (i.e. between the rising and the falling edge). The time settings in the control software are not activated. This mode is useful in applications where the light level of the scene changes during operation. Change of exposure time is possible from one frame to the next.



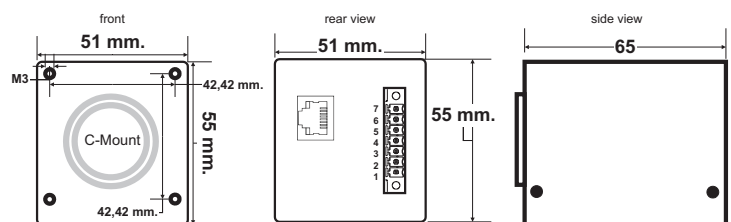
Configuration Software:

The SVCam CompactLine cameras come with our "Convenient Cam" software, which allows easy interactive setup of all camera parameters. The program runs under Windows XP and, independently from "Convenient Cam", the camera can be configured using any terminal software that supports serial communication. The SVCam-GigE Version use as GUI our "SVCapture"-software, with similar functions. It is also compatible with Windows XP, and, independently, the camera can be configured using any GigE Vision compliant software.

Dimensions CameraLink Version:



Dimensions GigE Version:



Ordering Guide:

Monochrome:	Color:	
svs274MUCP	svs274CUCP	(frame rate 25 Hz)
svs274MUGE	svs274CUGE	(frame rate 26 Hz)