

# SVCam-svs285 "U"



## Low Noise 1.4-Megapixel Camera

The svs285 U version compact camera is available with 12 Bit output at a resolution of 1360 x 1024 pixel. These cameras are designed to reach extraordinary performance at low noise and are enclosed in a very small housing.



The modular concept of SVCam-CP provides our customers with a fast and low cost way to design customized versions for application specific requirements.

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
- Extend the exposure under low light level condition

Ask us for other models from VGA up to 16 megapixel.

GEN<i>CAM

GigE<sup>TM</sup>  
VISION

CAMERA  
Link<sup>TM</sup>

- Progressive scan technology
- Area of interest (AOI) for GigE version
- 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)
- 16 MB memory inside (GigE)
- 12 Bit video data stream (14 Bit ADC used)
- Adjustable gain
- Low offset
- S/N ratio > 60 dB or > 66 dB @ 16 Hz (CP)
- 12-8 Bit LUT (GigE)
- White balance (GigE, color)
- 2 x 2 binning mode (GigE)
- 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 year warranty

# SVCam-svs285 "U"



## Camera Types:

Camera Type	svs285XUCP	svs285XUGE
Resolution	1360 x 1024	1360 x 1024
Framerate (Hz, max.)	33*	33*
Pixel ( $\mu\text{m}^2$ )	6.45 x 6.45	6.45 x 6.45
Exposure Time internal	50 $\mu\text{s}$ - 8 min	40 $\mu\text{s}$ - 2 s
Exposure Time external	20 $\mu\text{s}$ - 00	40 $\mu\text{s}$ - 00
CCD-Size Equivalent	2/3"	2/3"

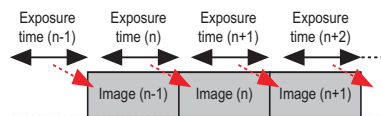
x = Monochrome  
x = Color

\*Clockspeed at 64 MHz (CP)/65 MHz (GigE)

## Operation Modes:

### Mode: Free Running

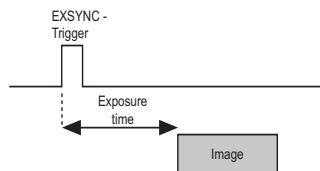
In this mode the camera creates all sync signals itself. The framerate is at its maximum and there is no need to trigger the camera



(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 online during operation. The time set stays resident after power off.

### Mode: External Trigger, Internal Exposure Control

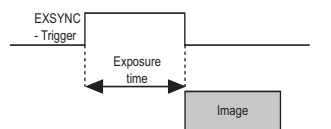
In this mode the camera starts the image acquisition after an external trigger event. The exposure time is controlled by the camera. The value for the exposure time is entered via serial interface over the framegrabber CameraLink connection.



The trigger signal is fed into the camera by the framegrabber or directly to the camera.

### Mode: External Trigger, External Exposure Control

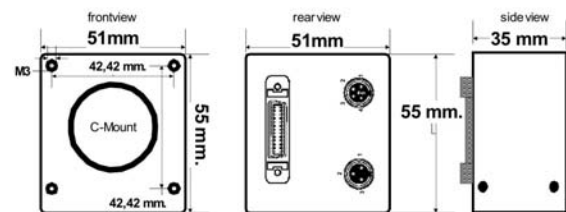
In this mode the camera is waiting for an external trigger which starts integration and read out. Exposure time can be varied using the length of the EXSYNC pulse (i.e. between the high going edge and the low going edge). The time settings in the control software are not activated. This mode is useful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



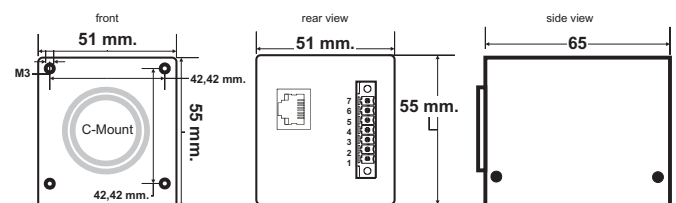
## Configuration Software:

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:
svs285MUCP	svs285CUCP
svs285MUGE	svs285CUGE