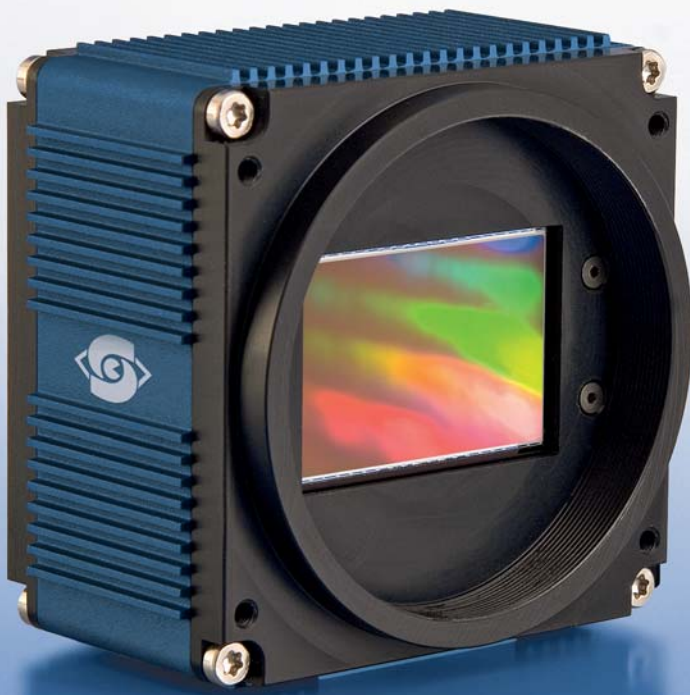


# SVCam-HR

11 and 16 Megapixel



# SVCam-HR

Largest field of view at smallest details guaranteed

The cameras svs11002 and svs16000 provide the highest resolutions available for machine vision. They are equipped with the Interline-Transfer CCD sensors KAI11002 (11 megapixel) and KAI16000 (16 megapixel) by KODAK, having a diagonal dimension of 43.3mm. Both models are available as monochrome or color versions, with CameraLink or with Gigabit-Ethernet interface.

Capturing a large field of view quick and easy, saves processing time and avoids stitching problems. Typical areas of application for these cameras are optical metrology, quality assurance in the production of LCD-panels, wafers and solar cells, surveillance of large spaces with digital zoom possibilities, and special domains of traffic monitoring.

The SVCam-HR camera family ensures the maximum performance required for such demands. The **CameraLink** and **GigE** interfaces are internationally standardized for highest data transfer rates between camera and PC. With their cutting-edge electronics design the cameras offer very high image frequencies at extremely low noise levels. The compact housing of our cameras enables installation even with limited space conditions.

Sophisticated processing of the analog CCD video signal by Correlated Double Sampling (CDS) to reduce noise and an early conversion into digital signals results in an excellent signal-to-noise ratio. The integrated intelligence offers various modes for exposure time and trigger control settings.

## Striking advantages of GigE Vision

The possibilities opened up by the international interface standard GigE Vision (Gigabit Ethernet for Machine Vision) go far beyond those of previously used image processing standards. Vision hardware compliant with this specification communicates with the host PC by means of a standard defined protocol based on UDP/IP. The GigE Vision standard refers to the standard software interface GenICam (Generic Interface for Cameras) that addresses all the camera functions via a standardized XML file, thus guaranteeing that the entire software is mutually compatible, and the GigE versions of the SVCam-HR series is compatibly

bound into this standardized communications structure. GigE Vision offers numerous hardware and software advantages for users over the entire range of industrial image processing. Most important of these advantages is that the hardware used can be easily and rapidly replaced, thus shortening design cycles and reducing development costs.

- > Ethernet infrastructure with cost effective and proven components and easy installation
- > No need to use a frame grabber board
- > GigE is downwards-compatible to Fast Ethernet and upwards-compatible to 10 GB Ethernet
- > Wide range of factory-made industrial-standard plugs and cables up to protection class IP68
- > High image data transfer rate of 100 MB/sec
- > Up to 100m range without additional data communications equipment
- > Wide range of applications in image processing
- > Any desired number of devices can be connected to the host
- > Remote service capability

## All camera models of the SVCam-HR series have the following features:

- > Progressive Scan CCD sensors
- > Monochrome and color versions (Bayer Pattern)
- > Various trigger (internal/external/free running) and exposure modes
- > Adjustable gain
- > Low offset
- > Various binning modes
- > Partial Scan
- > Optical interface M58, F-Mount optionally available
- > Operating temperature range from -10°C (non-condensing) to +40°C
- > Power supply: +12V DC

#### CameraLink specific features:

- > 8 or 10 Bit data; some models with 12 Bit option available

#### GigE specific features:

- > GigE Vision (Gigabit Ethernet) standard compliant
- > Two parallel Ethernet connections in order to overcome speed limitations (Especially useful if more than 8 Bits are needed)

- > 100/1000 MBit Ethernet interface
- > 14 Bit ADC, 8, 10 or 12 Bit transferred
- > Area of interest (AOI)
- > White balance for color versions
- > Opto-isolated strobe output, configurable delay
- > SDK for Windows and Linux available

#### Overview CameraLink Cameras



Camera Type	Resolution (pixel)	Sensor Size	Frame Rate (Hz, max.)	Pixel Size (μm)	Housing Size (mm)	ADC Bit Option	Lens Mount
svs11002	4008 x 2672	43.3mm Diag.	7.5	9	65x67x45	10/12	M58/F-Mount
svs16000	4872 x 3248	43.3mm Diag.	4	7.4	65x67x43	10/12	M58/F-Mount

#### Overview GigE Cameras



Camera Type	Resolution (pixel)	Sensor Size	Frame Rate (Hz, max.)	Pixel Size (μm)	Housing Size (mm)	ADC Bit Option	Lens Mount
svs11002	4008 x 2672	43.3mm Diag.	6.2	9	64x67x76	14	M58/F-Mount
svs16000	4872 x 3248	43.3mm Diag.	4	7.4	70x71x51	14	M58/F-Mount

For more resolutions see our SVCam-CF datasheet.

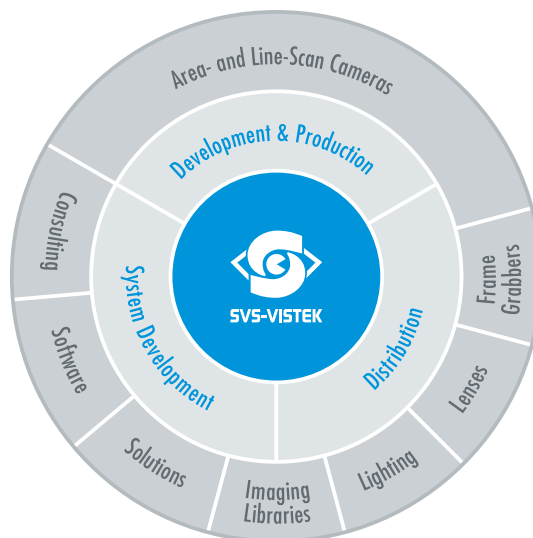
## Application areas

SVCam cameras are used successfully in a wide range of different industries, e. g.:

- > Aerospace
- > Automotive
- > Beverage
- > Food
- > Information
- > Mechanical engineering
- > Medical technology
- > Optical metrology
- > Pharmaceutical
- > Photovoltaic/power engineering
- > Plastics
- > Printing
- > Semiconductor
- > Timber
- > Traffic monitoring
- > Transportation systems

## Product range

The portfolio of our product range for the domestic market covers the whole field of machine vision components. Internationally we provide global sales, service and support through our distributors in Europe, USA and Asia for the SVCam camera series.



## Supported Interfaces



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