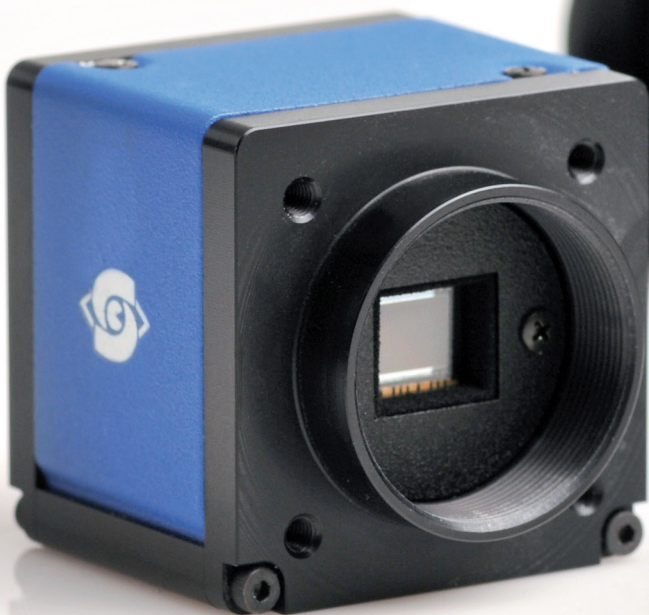




SVCam-ECO

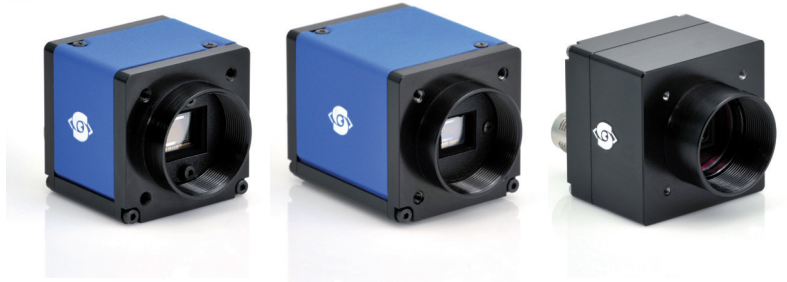
VGA up to 5 MegaPixel,
Standard-, PoE-, 4IO and IP67-versions



Scale your vision.

SVCam-ECO

VGA up to 5 MegaPixel, **GIGE™**
VISION
Standard-, PoE-, 4IO and IP67-versions



Unsurpassed flexibility with great performance and affordability. This characterizes the SVCam-ECO series best. You will find the most popular CCD-Sensors from Sony in the ECO series. SVCam-ECO cameras are available in 60 different versions with resolutions from VGA up to 5 Megapixel. ECO series cameras are designed to achieve high frame rates while maintaining excellent signal-to-noise ratio and at the same time providing an industry-leading small footprint. Supporting the standards of GigE Vision™ and GenICam™ the SVCam-ECO series opens up new dimensions for integration into your application SW-Environment.

Whether you prefer to power the SVCam-ECO from your machine and use the precise I/O-timing of the robust ECO I/O-concept, or you want to get advantage of the "Power over Ethernet" technology (PoE version) due to the lean cable concept - SVCam-ECO provides an efficient answer to your demands.

These ensures an easy integration into new or existing imaging systems. With its cutting-edge electronics design the ECO series offers very high image frame rates at extremely low noise levels. Sophisticated processing of the critical analog CCD video signal by Correlated Double Sampling (CDS) leads to significant noise reduction. The integrated intelligence offers various modes for exposure time and trigger control settings. The SVCam-ECO series enables maximum performance for early identification of defective products, reduction of fabrication costs and an increase in yield.

All versions of the SVCam-ECO series have the following features:

- > Progressive Scan CCD sensors
- > Monochrome and color versions (Bayer Pattern)
- > Various trigger (int./ext./free running) and exposure modes
- > Auto- and manual exposure and gain
- > Various binning modes



Features with real value: Power your LED light directly from the ECO series and use it as an innovative strobe controller.

- > Area of interest modes (AOI)
- > Gigabit Ethernet interface with max. 120 MB/s datarate
- > GigE-Vision™ and GenICam™ standard compliant
- > 8/12 Bit video data stream (14 Bit ADC)
- > 64 MB memory inside
- > White balance for color versions (one push or manual)
- > Standard I/O-Concept: 2 x Input (0-24 V), 1 x Input RS-422, 2 x Output (open drain), 1 x Output RS-422, 1 x Serial RS-232
- > SDK for Windows 7/8 (32/64 Bit) and Linux available
- > Sequence-Shutter and enhanced Strobe-Functionality
- > Prepared for Lens- and Pan/Tilt unit control

Advantages of GigE Vision

Allows easy and quick interchangeability between hardware resulting in shorter design cycles and reduced development costs.

- > Cost effective
- > Secure data transfer
- > Wide range of „off the shelf“ industrial-standard plugs and cables
- > High bandwidth data transfer rate (120 MB/sec per Output)
- > Up to 100 m range without extra switch
- > Remote service capability

Versatile IO Concept

Models equipped with the 4io-Interface provide full control of timing and illumination via the camera SDK. Each of the 4 outputs can be individually configured and managed using pulse-width control. The integrated sequencer allows multiple exposures with varied settings to be programmed, creating new and cost effective options.

- > 4 x open drain in and out-put
- > Power MOSFET Transistors
- > PWM strobe controle
- > Sequencer for various configurations
- > Programmable via Ethernet & SDK

Pover over Ethernet (IEEE 802.af)

Ideal for installations where a separate power cable can't be accommodated.

The PoE version is the perfect choice when the production equipment does not require a direct connection to the camera. With only a single cable connecting the camera, the installation is greatly simplified.

Camera Type	Sensor Size diag.	Resolution [Pixel]	Pixel Size [μm]	Architecture	Lens Mount	Dimensions [mm]	max. Frame Rate [fps]
eco618	1/4"	656 x 492	5.6 x 5.6	CCD	C/CS	38 x 38 x 33	155
eco424	1/3"	656 x 492	7.4 x 7.4	CCD	C/CS	38 x 38 x 33	124
eco414	1/2"	656 x 492	9.9 x 9.9	CCD	C/CS	38 x 38 x 33	125
eco415	1/2"	780 x 580	8.3 x 8.3	CCD	C/CS	38 x 38 x 33	86
eco204	1/3"	1,024 x 776	4.65 x 4.65	CCD	C/CS	38 x 38 x 33	47
eco445	1/3"	1,296 x 964	3.75 x 3.75	CCD	C/CS	38 x 38 x 33	30
eco267	1/2"	1,392 x 1,040	4.65 x 4.65	CCD	C/CS	38 x 38 x 33	25
eco285	2/3"	1,392 x 1,040	6.45 x 6.45	CCD	C	38 x 38 x 34	34
eco274	1/1.8"	1,600 x 1,236	4.4 x 4.4	CCD	C/CS	38 x 38 x 33	26.5
eco655	2/3"	2,448 x 2,050	3.45x 3.45	CCD	C/CS	38 x 38 x 33	10
eco625	2/3"	2,448 x 2,050	3.45x 3.45	CCD	C/CS	38 x 38 x 33	16

PoE versions on request

BlackLine – IP67

The SVS-VISTEK "BlackLine" option permits cost effective integration of the more exposed blocks of machine vision even in harsh industrial environments.

- > Up to IP67 protection class (including lens tube)
- > M12 connectors for industrial grade wiring
- > Optimized temperature range (special requirements possible!)
- > GigE Vision and GenCam-Standard

Connector pin-out

Dimensions [mm]

Connector pin-out

410-Option

- VIN- (GND)
- VIN+ (10V to 25V DC)
- not connected
- not connected
- IN1 (0-24V)
- IN2 (0-24V)
- OUT1 (open drain)
- OUT2 (open drain)
- IN3 (0-24V)
- IN4 (0-24V)
- OUT3 (open drain)
- OUT4 (open drain)

Front view: 38mm width, 26mm height, C/CS-Mount

Side view: 33mm depth

Side view: 45mm width, PoE version

Rear view: 38mm width

eco285: C-Mount only

Standard and PoE

- VIN- (GND)
- VIN+ (10V to 25V DC)
- RXD (RS232)
- TXD (RS232)
- IN1 (0-24V)
- IN2 (0-24V)
- OUT1 (open drain)
- OUT2 (open drain)
- IN3+ (RS422)
- IN3- (RS422)
- OUT3+ (RS422)
- OUT3- (RS422)

Ethernet Standard and PoE

1 2 3 4 5 6 7 8

IP67 version

- VIN+ (10V to 25V DC)
- VIN- (GND)
- RXD (RS232)
- TXD (RS232)
- IN1 (0-24V)
- IN2 (0-24V)
- OUT1 (open drain)
- OUT2 (open drain)
- IN3+ (RS422)
- IN3- (RS422)
- OUT3+ (RS422)
- OUT3- (RS422)

Ethernet IP67

On IP67 versions on M12-8 connector is used for Ethernet communication (2)

IP67 Blackline

Front view: 42mm width, 26mm height, C-Mount

Side view: 31,5mm depth

Rear view: 42mm width

Optional IP67 lens protector tubes are available for Blackline

Application Areas

SVCam cameras can be found in a broad range of industries:

- > Aerospace
- > Automotive
- > Beverage
- > Food
- > Information
- > Mechanical engineering
- > Medical technology
- > Optical metrology
- > Pharmaceutical
- > Photovoltaic/power engineering
- > Plastics
- > Printing
- > Semiconductor
- > Wood and Timber
- > Traffic monitoring
- > Intelligent Transportation Systems (ITS)



SVCam – High-performance CCD cameras made in Germany

„SVCam“ is a universal family of machine vision cameras, representing the leading edge of performance, with a modular design that allows tailoring to specific customer requirements:

SVCam-ECO

Best choice for the small wallet. Impresses with its minimal footprint, without compromising on performance. VGA up to 5 megapixel. GigE Vision interface featuring PoE. Can be delivered in a housing with high IP rating (BlackLine series).

SVCam EXO

The natural choice for users requiring a high degree of flexibility. Featuring a wide range of CCD and CMOS sensors, paired with GigE Vision, CameraLink or USB3 Vision interface. Incorporates a unique LED illumination driver for individual control of up to 4 strobe lights.

SVCam-EVO

Combining high-resolution performance of CCD and CMOS sensors up 12 Megapixels with unsurpassed speed performance of Dual GigE Vision or Camera Link interfaces. Offering a wide range of user-friendly features and functions.

SVCam-HR

The top of the line product range targeting applications for which a compromise on quality is not an option. Fulfilling even the toughest demands for resolution combined with extremely high data rate.

SVIndividual

Application specific tailoring of cameras and imaging components to your unique requirements. SVS-VISTEK has more than two decades of experience in providing customized solutions for system integrators and builders. Ranging from non-branded housings to modification of mechanical or circuit designs. Challenge us with your ideas!

Supported Interfaces

CoaxPress
The next generation digital interface

GEN<i>CAM

GigE
VISION

CAMERA
Link

USB
VISION

For more information our sales team will be pleased to assist you with expert advice. Please contact us.



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