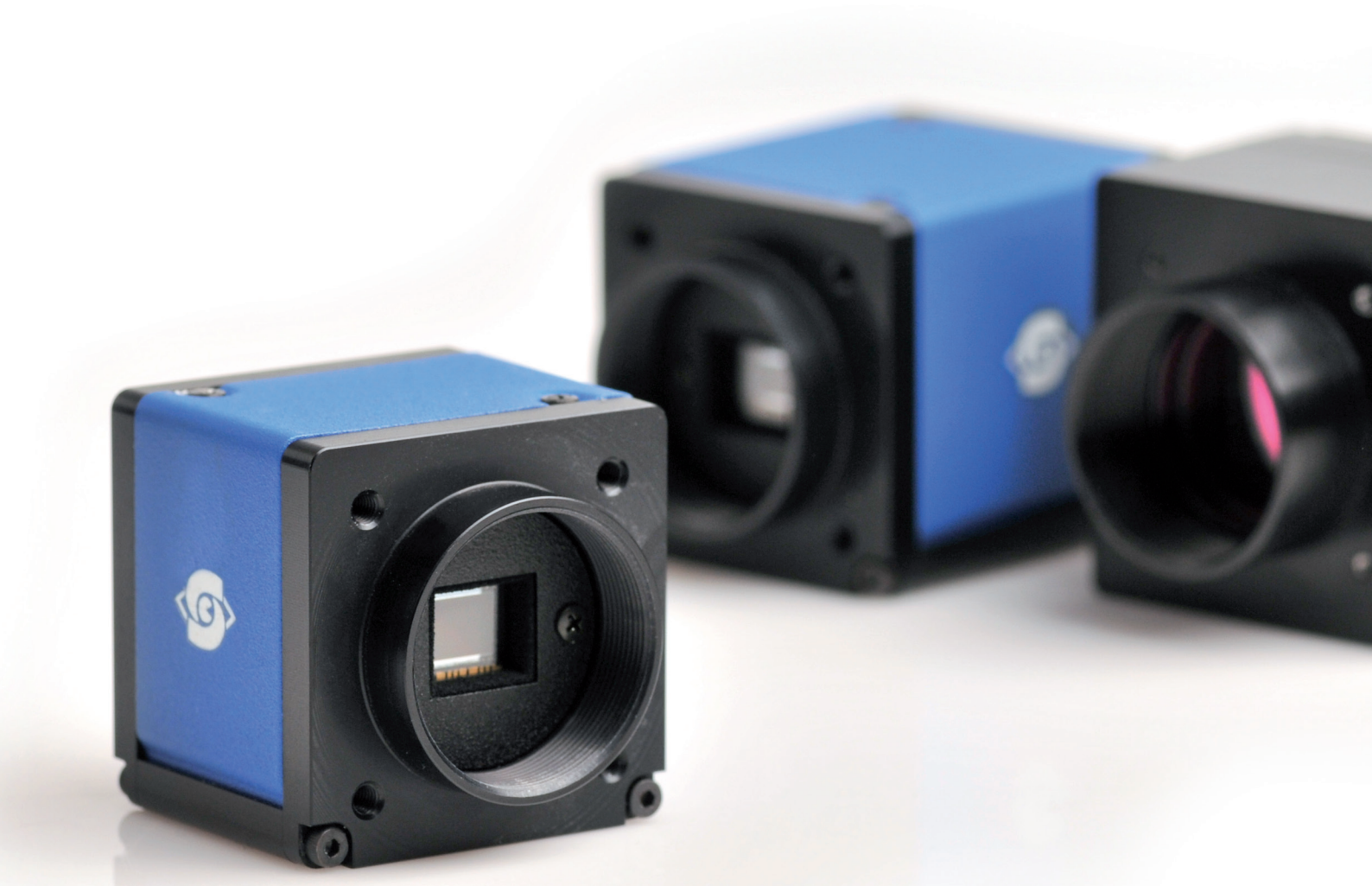
SVS-VISTEK

SVCam-ECO²

1 up to 12 MegaPixel

Standard- and IP67-versions

GiGE VISION™



Scale your vision.

SVCam-ECO²

1 up to 12 MegaPixel, Standard- and IP67-versions

The SVCam-ECO² significantly extends the range of our „standard camera ECO“. In the same form factor as the renowned -ECO series with sensors from ON Semiconductor and Sony up to 12 megapixel are supported with reasonable pixel sizes. The possible bandwidth of the GigE Vision interface is hereby fully exploited. The special and robust BlackLine version with M12 plug-in system, suitable for the automation world is a powerful option for the ECO². The feature set, as well as the pin assignments, is a coherent piece of engineering and particularly user-friendly.

ECO stands for outstanding effectiveness, diversity and features with real added value for quality assurance. SVS-VISTEK is now expanding the offering with a completely new series of models, the diversity of the ECO series. Under the name ECO² recent high-quality CCD sensors from ON Semiconductor and Sony are integrated and optimized in terms of image quality and operating modes. Thus, extremely demanding solutions can be solved easily. This series is continues to grow, improved and equipped with industrial grade features properties since 2009. Today, over 100 versions are available - probably the most complete camera series in the world !

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

> Progressive Scan CCD sensors
> 1 to 12 Mega Pixel with optimized frame rates
> Monochrome and color versions (Bayer Pattern)
> Various trigger (int./ext./free running) and exposure modes
> Logic-Trigger fuctions
> Adjustable gain and Auto Gain
> Auto- exposure
> Various binning modes
> White balance for color versions (one push or manual)
> Partial Scan / Area of interest modes (AOI)
> 8/12 Bit video data stream (14 Bit ADC)
> Tap Balancing
> 64 MB memory inside
> Programmable Sequencer for Shutter and LED light
> C-Mount lens interface
> GigE-Vision and GenICam standard compliant
> SDK for Windows 7/8 (32/64 Bit) and Linux available

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 (standard: 2)
> Power MOSFET Transistors
> PWM strobe controle
> Sequencer for various configurations
> Programmable via Ethernet & SDK

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

Advantages of GigE Vision

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

> Cost effective
> secure data trandfer
> 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

Power over Ethernet

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]	IP67	max. Frame Rate [fps]
eco1050	1/2"	1,024 x 1,024	5.5 x 5.5	CCD	C	38 x 38 x 45	✔	56.1
eco2050	2/3"	1,600 x 1,200	5.5 x 5.5	CCD	C	38 x 38 x 45	✔	33.2
eco2150	2/3"	1,920 x 1,080	5.5 x 5.5	CCD	C	38 x 38 x 45	✔	31.7
eco674	1/2"	1,920 x 1,460	4.54 x 4.54	CCD	C	38 x 38 x 45		19.9
eco4050	1"	2,336 x 1,752	5.5 x 5.5	CCD	C	38 x 38 x 45	✔	16.8
eco695	1"	2,752 x 2,204	4.54 x 4.54	CCD	C	38 x 38 x 45		10.1
eco815	1"	3,360 x 2,712	3.69 x 3.69	CCD	C	38 x 38 x 45		7
eco834	1"	4,224 x 2,838	3.1 x 3.1	CCD	C	38 x 38 x 45		5.5

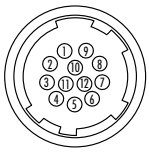
BlackLine – IP67

TThe SVS-VISTEK "BlackLine" option permits cost effective integration of the more exposed blocks of machine vision even in harsh industrial environments. The ECO² "Black-Line" comes with a choice of ON Semi sensors ranging from 1 to 4 megapixels.

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

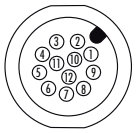
Connector pin-out

410-Option



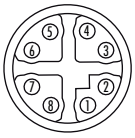
1	VIN- (GND)
2	VIN+ (10V to 25V DC)
3	not connected
4	not connected
5	IN1 (0-24V)
6	IN2 (0-24V)
7	OUT1 (open drain)
8	OUT2 (open drain)
9	IN3 (0-24V)
10	IN4 (0-24V)
11	OUT3 (open drain)
12	OUT4 (open drain)

IP67 version



1	VIN+ (10 V to 25 V DC)
2	VIN- (GND)
3	RXD (RS232)
4	TXD (RS232)
5	IN1 (0-24V)
6	IN2 (0-24V)
7	OUT1 (open drain)
8	OUT2 (open drain)
9	IN3+ (RS422)
10	IN3- (RS422)
11	OUT3+ (RS422)
12	OUT3- (RS422)

Ethernet IP67

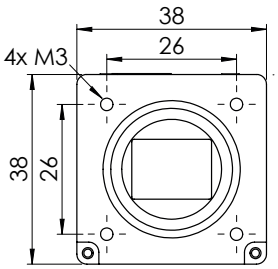


On IP67 versions an M12-8 connector is used for Ethernet communication (2)

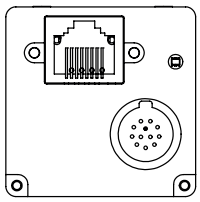
Dimensions [mm]

Standard version

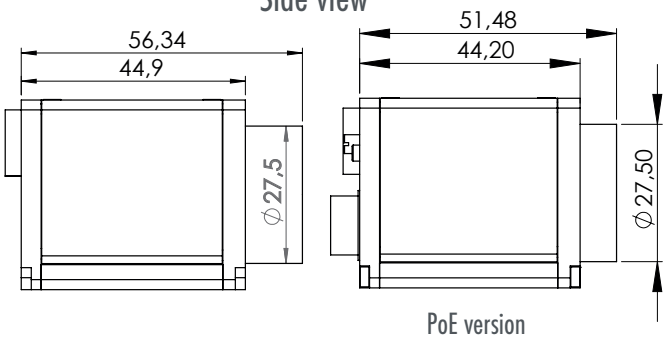
Front view



Rear view



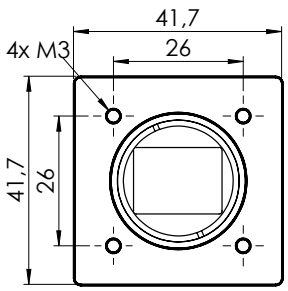
Side view



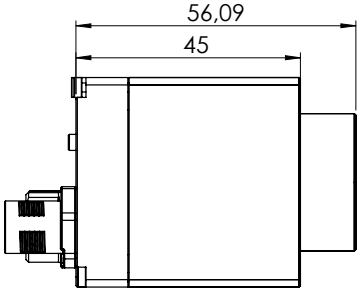
PoE version

IP67 version

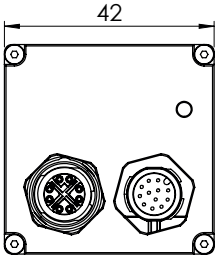
Front view



Side view



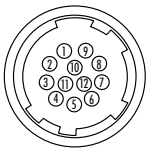
Rear view



Optional IP67 lens protector tubes are available for BlackLine

Connector pin-out

Standard and PoE



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9	IN3+ (RS422)
10	IN3- (RS422)
11	OUT3+ (RS422)
12	OUT3- (RS422)

Ethernet Standard and PoE

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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