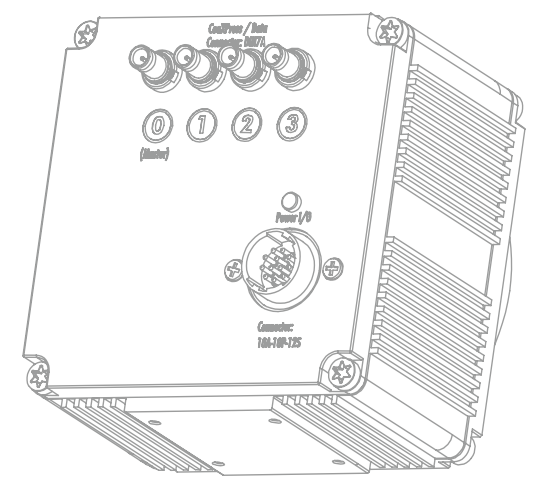
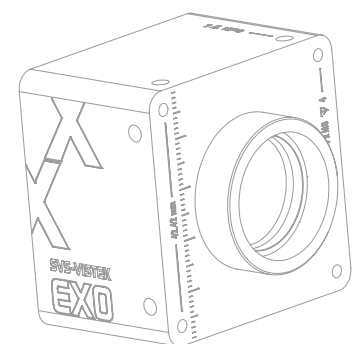
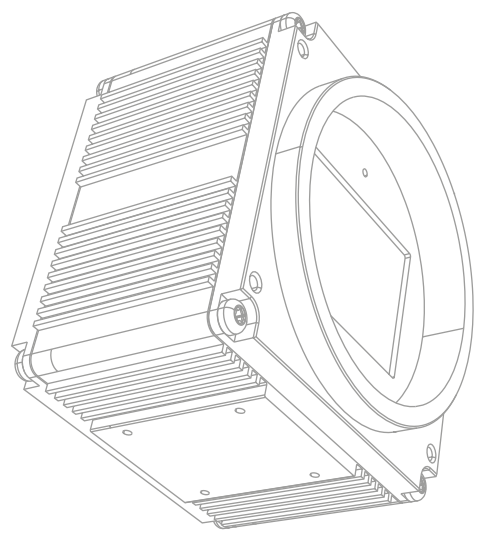


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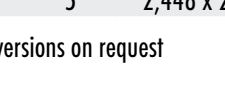
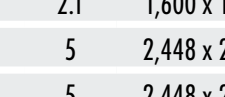
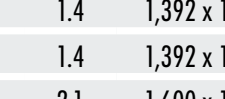
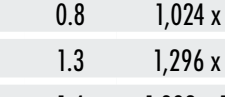
Industrial Cameras

SVCam-Product Line made by SVS-Vistek



ECO GigE Vision Cameras

Unsurpassed flexibility with great performance and affordability. This characterizes the SVCam-ECO series best. You will find all popular CCD-Sensors from Sony in the ECO series. SVCam-ECO cameras are available in more than 100 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 ratios and at the same time providing a 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.



ECO Series

VGA TO 5 MEGAPIXEL



Special Features of the ECO Series:

- > Progressive Scan CCD sensors
- > Area of Interest modes (AOI)
- > 8/12 Bit video data stream (14 Bit ADC)
- > 64 MB frame buffer
- > White balance for color versions (one push or manual)
- > Wide range Power conditions: 10 - 25 V DC
- > Sequence-Shutter and enhanced Strobe-Functionality
- > Up to 4 x direct drive and control of LED lighting
- > GigE Vision and GenICam compliance
- > Dimensions [mm]: 38 x 38 x 33

Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	GigE	BlackLine
								max. Frame Rate [fps]	IP 67
eco618	0.3	656 x 492	1/4"	Sony ICX618	5.6	CCD	C/CS	155	✓
eco424	0.3	656 x 492	1/3"	Sony ICX424	7.4	CCD	C/CS	124	✓
eco414	0.3	656 x 492	1/2"	Sony ICX414	9.9	CCD	C/CS	125	✓
eco415	0.4	780 x 580	1/2"	Sony ICX415	8.3	CCD	C/CS	86	✓
eco204	0.8	1,024 x 776	1/3"	Sony ICX204	4.65	CCD	C/CS	47	✓
eco445	1.3	1,296 x 964	1/3"	Sony ICX445	3.75	CCD	C/CS	30	✓
eco267	1.4	1,392 x 1,040	1/2"	Sony ICX267	4.65	CCD	C/CS	25	✓
eco285	1.4	1,392 x 1,040	2/3"	Sony IC285	6.45	CCD	C	34	✓
eco274	2.1	1,600 x 1,236	1/1.8"	Sony ICX274	4.4	CCD	C/CS	26.5	✓
eco655	5	2,448 x 2,050	2/3"	Sony ICX655	3.45	CCD	C/CS	10	✓
eco625	5	2,448 x 2,050	2/3"	Sony ICX625	3.45	CCD	C/CS	20	✓

PoE versions on request

ECO² GigE Vision Cameras

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 Semi 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. The ECO² series is the perfect extension of the ECO series and ensures long-term and reliable technology.



ECO² Series

1 TO 12 MEGA PIXEL



Special Features of the ECO² Series:

- > Progressive Scan Sensors
- > 2 x direct drive and control of LED lighting
- > GigE Vision and GenCam compliance
- > 64 MB frame buffer
- > Industrial IO interface for easy integration
- > Dimensions [mm]: 38 x 38 x 45



Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	GigE	BlackLine
								max. Frame Rate [fps]	IP 67
eco1050	1	1,024 x 1,024	1/2"	ON-Semi KAI-01050	5.5	CCD	C	56.1	✓
eco2050	2	1,600 x 1,200	2/3"	ON-Semi KAI-02050	5.5	CCD	C	33.2	✓
eco2150	2	1,920 x 1,080	2/3"	ON-Semi KAI-02150	5.5	CCD	C	31.7	✓
eco674	2.8	1,920 x 1,460	1/2"	Sony ICX674	4.54	CCD	C	19.9	
eco4050	4	2,336 x 1,752	1"	ON-Semi KAI-04050	5.5	CCD	C	16.8	✓
eco695	6	2,752 x 2,204	1"	Sony ICX695	4.54	CCD	C	10.1	
eco815	9	3,360 x 2,712	1"	Sony ICX815	3.69	CCD	C	7	
eco834	12	4,224 x 2,838	1"	Sony ICX834	3.1	CCD	C	5.5	

EXO Camera Link Cameras

SVCam-EXO Camera Link models let you maintain the existing and proven infrastructure for years to come, while making use of the newest range of image sensors. The serialized interface has gained wide popularity and acceptance thanks to its high bandwidth. The EXO series was the first Camera Link model to include features such as 4 I/O strobe controller and look up table.

- > ConvCam Software control
- > 256 MB frame buffer

EXO GigE Vision Cameras

SVCam-EXO series cameras with GigE Vision interface gives your applications an extreme scalability. Quick and easy hardware interchangeability results in shorter design cycles and reduced development costs. Further value is added to your application by a virtually limitless feature set. As an example, the 4 I/O LED driver with standardized software control.

- > Cost effective
- > Wide range of „off the shelf“ industrial-standard plugs and cables
- > Data transfer rate up to 120 MB/sec
- > Up to 100 m range without additional switch
- > Wide range of applications in image processing
- > Remote service capability
- > 256 MB frame buffer

EXO USB3 Vision Cameras

The SVCam-EXO is one of the most flexible and scalable cameras for the industrial market segment. The USB3 Vision interface is easy to integrate in your system, with a data rate up to effective 350 MB/sec. The time to market for applications is shortened, reducing costs even further. Power the camera via the interface and reduce cable complexity. EXO provides Plug-and-play capability for the whole range of 2.3 to 12 MP resolution.

- > Up to 350 MB/sec effective transfer rate
- > Leverages existing infrastructure for cables and connectors
- > Power camera with up to 4.5 W
- > Cost effective/Easy implementation and interfacing
- > 256 MB frame buffer



EXO Series

2.3 TO 12 MEGAPIXEL



Special Features of the EXO Series:

- > Sensors from Sony, ON Semi and CMOSIS
- > Global Shutter CCD and CMOS
- > 2.3 to 12 megapixel
- > 4 x direct drive and control of LED lightning
- > GigE Vision, Camera Link and USB3 supported
- > logical trigger functions
- > GenICam compliant
- > Dimensions [mm]: 50 x 50 x 43 or 50 (depending on sensor)



Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	GigE	Camera Link	USB3
								max. Frame Rate [fps]		
exo174	2.3	1,920 x 1,200	1/1.2"	Sony IMX174	5.86	CMOS	C	49	70	160
exo249	2.3	1,920 x 1,200	1/1.2"	Sony IMX249	5.86	CMOS	C	31	-	31
exo252	3.2	2,048 x 1,536	1/1.8"	Sony IMX252	3.45	CMOS	C	-	52	110
exo265	3.2	2,048 x 1,536	1/1.8"	Sony IMX265	3.45	CMOS	C	34	-	55
exo250	5	2,448 x 2,048	2/3"	Sony IMX250	3.45	CMOS	C	23	34	72
exo264	5	2,448 x 2,048	2/3"	Sony IMX264	3.45	CMOS	C	23	-	35
exo694	6	2,752 x 2,204	1"	Sony ICX694	4.54	CCD	C	-	25	25
exo814	9	3,360 x 2,712	1"	Sony ICX814	3.69	CCD	C	-	18	18
exo255*	9	4,112 x 2,176	1"	Sony IMX255	3.45	CMOS	C	-	-	42
exo267*	9	4,112 x 2,176	1"	Sony IMX267	3.45	CMOS	C	12	-	32
exo253*	12	4,096 x 3,000	1"	Sony IMX253	3.45	CMOS	C	-	-	29
exo304*	12	4,096 x 3,000	1"	Sony IMX304	3.45	CMOS	C	9	-	23
exo834	12	4,242 x 2,830	1"	Sony ICX834	3.1	CCD	C	-	14.5	14.5
exo4000	4	2,048 x 2,048	1"	CMOSIS CMV4000	5.5	CMOS	C	27	40	87
exo5000	5	2,592 x 2,048	1"	ON-Semi Python 5000	4.8	CMOS	C	22	34	65

*preliminary

EVO GigE Vision Cameras

With their cutting-edge electronics design and the use of quad-tap CCD- or CMOS sensors the EVO cameras offer very high 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. Straight forward conversion into digital signals results in an excellent signal-to-noise ratio. Additionally, the integration of intelligent processing offers various modes for exposure time and trigger control settings. The compact housing allows installation even in limited space conditions.

Special Features of the EVO GigE Series:

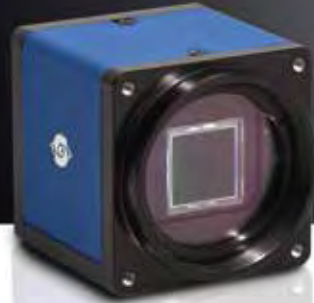
- > Dual GigE Vision Data-Interface
- > Cable lengths up to 100 meters are possible
- > Any desired AOI (Area Of Interest) possible
- > SDK for Windows (32/64 bit) and Linux available
- > 2 x direct drive and control of LED lighting
- > 128 MB frame buffer
- > Dimensions [mm]: 50 x 50 x 47

EVO Camera Link Cameras

High performance thanks to mature sensor knowledge. Precisely this allows in the Camera Link versions of the EVO, the extra frame rate - often critical to your advantage. There is a suitable model for each task. Identical and easy integration into your system and maximum camera technology in the smallest package. This was our goal in the development of the SVCam-EVO.

Special Features of the EVO Camera Link Series:

- > 1, 2, 4, 8 and 12 megapixel, progressive scan sensors
- > Camera Link - Medium configuration (2 connectors)
- > C-mount and M42 lens mount options
- > Highest frame rate
- > 128 MB frame buffer
- > Dimensions [mm]: 50 x 50 x 47



EVO Series

1 TO 12 MEGA PIXEL



Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [μ m]	Architecture	Mount	GigE	Camera Link
								max. Frame Rate [fps]	
evo1050	1	1,024 x 1,024	1/2"	ON-Semi KAI-01050	5.5	CCD	C	147	180
evo2050	2	1,600 x 1,200	2/3"	ON-Semi KAI-02050	5.5	CCD	C	81.8	106
evo2150	2	1,920 x 1,080	2/3"	ON-Semi KAI-02150	5.5	CCD	C	78	100
evo4050	4	2,336 x 1,752	1"	ON-Semi KAI-04050	5.5	CCD	C	41.6	52
evo4070	4	2,048 x 2,048	21.43 mm	ON-Semi KAI-04070	7.4	CCD	M42	39.3	44
evo8051	8	3,296 x 2,472	4/3"	ON-Semi KAI-08051	5.5	CCD	M42	21.8	26.8
evo12040	12	4,000 x 3,000	4/3"	ON-Semi KAC-12040	4.7	CMOS	M42	15	-

EVO Tracer GigE Vision Cameras

The SVCam-EVO „Tracer“ combines the outstanding features of the EVO series with the advantages of the Micro-Four-Thirds lens standard. By allowing full user control of zoom, focus and aperture, the lens becomes an integrated part of the camera. The Micro-Four-Thirds lens system was pioneered by increasing demands in digital still photography. This standard, based on a bayonet mount, is widely used for compact cameras and is 100% optimized for digital image capture. There is a wide selection of suitable lenses, and more are on the way, making new and previously unthinkable solutions reality.

Special Features of the EVO Tracer Series:

- > Micro-Four-Thirds bayonet mount
- > Fast user control of zoom, aperture and focus
- > Lens settings controlled by Ethernet interface
- > Dual GigE Vision data interface
- > Two parallel Ethernet connections enabling increased data rates
- > User selectable AOI (Area Of Interest)
- > SDK for Windows (32/64bit) and Linux available
- > 128 MB frame buffer
- > Dimensions [mm]: 58 x 58 x 59



EVO Tracer Series

1 TO 8 MEGAPIXEL WITH MFT BAYONET



Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [μm]	Architecture	Mount	GigE
								max. Frame Rate [fps]
evo1050 TR	1	1,024 x 1,024	1/2"	ON-Semi KAI-01050	5.5	CCD	MFT	147
evo2050 TR	2	1,600 x 1,200	2/3"	ON-Semi KAI-02050	5.5	CCD	MFT	81.8
evo2150 TR	2	1,920 x 1,080	2/3"	ON-Semi KAI-02150	5.5	CCD	MFT	78
evo4050 TR	4	2,336 x 1,752	1"	ON-Semi KAI-04050	5.5	CCD	MFT	41.6
evo8051 TR	8	3,296 x 2,472	4/3"	ON-Semi KAI-08051	5.5	CCD	MFT	21.8

HR GigE Vision Cameras

The GigE cameras of the HR series impress with their housing concept, the wide-range lenses and the unique picture quality. Thanks to the dual GigE connection with the 4-Tap Version it is possible to achieve a maximum data rate of up to 240 MByte/s. A further advantage is the reliable, cost-effective transmission of the image data over a distance of 100 m with standard network technology. The GigE Vision and GenICam standards ensure rapid integration into the application software.

Special Features of the HR GigE Series:

- > Dual GigE Vision data interface
- > GigE Vision and GenICam standard compliant
- > Two parallel ethernet connections enable increased data rates
- > Cable lengths up to 100 meters are possible
- > Any AOI possible (Area of Interest)
- > SDK for Windows (32/64 bit) and Linux available
- > 128 MB frame buffer
- > Dimensions [mm]: 70 x 71 x 55

HR Camera Link Cameras

Our sophisticated sensor knowledge enables the Camera Link versions of the HR series the fast and direct connection to the sensor - often critical to your advantage. Available resolutions are 11 to 29 megapixel with the best of the CCD and new CMOS technology from ON Semi. 2-tap or 4-tap and newest high speed CMOS sensors are optimally supported with Camera Link base, medium or full standard.

HR CoaXPRESS Cameras

With CoaXPRESS 25 GBit/s can be transferred. This makes CXP the alternative to GigE Vision including frame rates comparable to Camera Link. Referring to the new generation of high speed CMOS sensors from ON Semi with up to 85 frames per second at 25 megapixel CoaXPRESS is supported by the SVCam hr25000. The high dynamic range with a further improved signal to noise ratio makes these sensors two of the fastest high class CMOS sensors available for our customers.

Special Features of the HR Camera Link and CXP Series:

- > GenICam compliant
- > Particle Image Velocimetry (PIV-Mode)
- > (optional) Power over Camera Link (PoCL)
- > 256 MB frame buffer (HR25 CXP: 512 MB, CL: 256 MB)
- > Dimensions [mm]: 70 x 71 x 55



HR Series

UP TO 29 MEGAPIXEL



Model	[MP]	Resolution [pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	GigE	Camera Link	CoaXPRESS
								max. Frame Rate [fps]		
hr11002	11	4,008 x 2,672	43.3 mm	ON-Semi KAI-11002	9	CCD	M58/F	6.1	10	-
hr16000	16	4,872 x 3,248	43.3 mm	ON-Semi KAI-16000	7.4	CCD	M58/F	4	4.6	-
hr16050	16	4,896 x 3,264	32.36 mm	ON-Semi KAI-16050	5.5	CCD	M58/F	10.8	10	-
hr16070	16	4,864 x 3,232	43.2 mm	ON-Semi KAI-16070	7.4	CCD	M58/F	11	10.2	-
hr25000	25	5,120 x 5,120	32.5 mm	ON-Semi Python 25K	4.5	CMOS	M58/F	-	31	80
hr29050	29	6,576 x 4,384	43.47 mm	ON-Semi KAI-29050	5.5	CCD	M58/F	6.2	5.9	-



SHR Camera Link Cameras

Enhance existing Camera Link architectures seamlessly, the SHR significantly boost bandwidth capability with the Camera Link 80-bit Full upgrade.

Employing as many as 16 taps, the sensor delivers its 47 megapixel in the finest CCD quality. The unique tap balancing, devised by SVS-Vistek, is renowned for being among the best – worldwide. It ensures effortless integration of the camera in your application.

Special Features of the Camera Link SHR Series:

- > Pixel Clock Setting
- > Power over Camera Link (PoCL)
- > 256 MB frame buffer

SHR CoaXPress Cameras

At Seven full frames of 47 megapixel per second, the SHR with CXP broadens the horizon for quality control. CoaXPress is among the fastest interface standards commonly used in industrial machine vision and therefore ideal for multi-tap sensors. The well-established I/O Concept, found in all SVS-Vistek camera series, warrants seamless integration of the SHR CXP in existing system architectures.

Special Features of the CoaXPress SHR Series:

- > High framerate
- > Cable length up to 200 meters
- > 512 MB frame buffer

new



SHR Series

UP TO 29 MEGAPIXEL



Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [μm]	Architecture	Mount	Camera Link	CoaXPress
								max. Frame Rate [fps]	
shr47051*	47	8,856 x 5,280	56.7 mm	ON-Semi KAI-47051	5.5	CCD	M72	7	7

Feature List



ECO **ECO²** **EXO** **EVO** **HR** **SHR**

Sensor	0.3 to 5 Mpixel, CCD Sony 1 tap sensors mono and color versions progressive scan or global shutter (image on demand)	1 to 12 Mpixel, CCD Sony and ON Semiconductor, 1 and 2 tap sensors	0.3 to 12 Mpixel, CMOS and CCD Sony, ON Semi and CMOSIS, 1, 2 and 4 tap / 8 chan. sen.	1 to 12 Mpixel, CMOS and CCD Sony and ON Semiconductor, 1, 2 and 4 tap / 12 chan. sen.	10 to 29 Mpixel, CMOS and CCD ON Semiconductor, 4 tap / 32 channel sensors	47 Mpixel, CCD ON Semiconductor, 16 (8 x 2) tap sensor
Camera Hardware Features	GigE Vision up to 120 MB/s 64 MB internal memory 8 or 12 bit pixel format	GigE Vision, Camera Link, or USB3 Vision 256 MB internal memory	GigE Vision, Camera Link, or USB3 Vision 256 MB internal memory	Dual GigE Vision, or Camera Link Medium 128 MB internal memory	Dual GigE Vision, Camera Link or 4 x CoaXPress 128 / 256 / 512 MB i. mem.	Camera Link (HS 80 bit) or, 2 x CoaXPress 256 / 512 MB i. memory
C or CS Mount	C Mount	optional Power over Camera Link C Mount or MFT	C, M42 (FFD 11.48) or MFT Lens Mount Adapters available	M58 Mount (FFD 11.48)	M72 Mount (FFD 19.55)	
38 x 38 x 33 mm optional IP Class up to IP67	38 x 38 x 45 mm	dynamic lens control (MFT) 50 x 50 x (43-47) mm precision machined housing	50 x 50 x 46 mm	70 x 71 x 55 mm	80 x 80 x 60 mm	
	manual or auto tap balancing		pixel clock setting for Camera Link			
Camera Firmware Features	2 x 2 binning horizontal and vertical image flip	custom defect pixel correction – custom defect pixel mapping		2 x 2 binning (4 x 4 for CL) shading correction for GigE Vision		
	area of interest (AOI – also “region” or “field” of interest) manual or delayed read out control – custom acquisition timing manual white balance manual, auto or external exposure time control – custom brightness target manual or auto gain adjustable offset PIV – particle image velocimetry (CCD sensors only) look up table (LUT) – custom pixel mapping internal, software or external trigger response integrated temperature sensor – SDK accessible					
I/O Features	up to 4 x open drain outputs strobe controller – in-camera LED light driver/controller, up to 3 A – easy synchronization sequencer – up to 16 programmable intervals with individual exposure & light programmable logic I/O functionality with timers PWM – high frequency pulse width modulation signal safe through high-low filter, debouncer and prescaler for trigger input versatile I/O concept: 24V signal levels – RS232 – optional RS422 differential signal	4 x open drain outputs		up to 2 x open drain outputs		
Standards	GenICam compatible compatible with most 3rd party software					



SVCam Camera Concept

Engineering

Design and Production

- > Flexible & Scalable
- > Individual Custom OEM Designs

Housing

- > Optical Precision
- > Durable rugged Mechanical Design
- > Advanced Temperature Management
- > Industrial Protection Class up to IP67



Unique Features

Unique Features

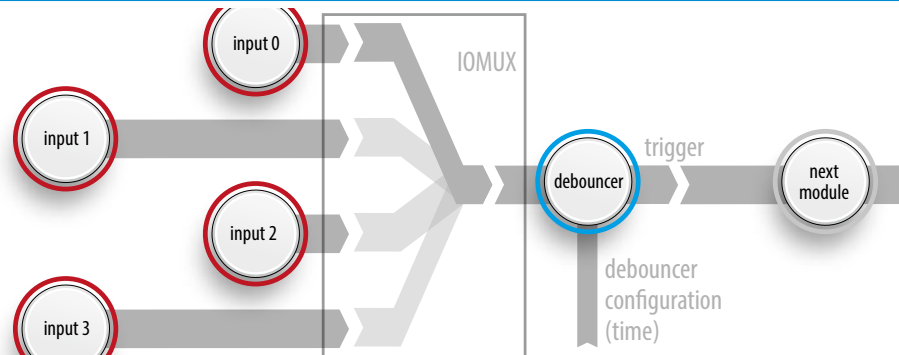
- > Configurable Frame Rates for Speed or Dynamic
- > Power Driver for LED-Light
- > Programmable Sequencer for Shutter and LED-Light
- > Precise I/O-Control and Timing
- > Same SDK Software
- > Common Feature Set
- > Support for Micro-Four-Thirds Lenses
- > Industrial Connectivity (Hirose and M12 versions)



Interfacing

Versatile I/O-Concept:

- > Configurable I/O-Matrix
- > up to 4 x Trigger Input, 0 - 24 V
- > up to 4 x Power Output (open drain), 0 - 24 V
- > Differential RS-422 and Serial RS-232 In- and Out-put
- > Homogeneous Interfacing Concept:
 - same Pin-Out
 - same Signal Levels
 - same Connectivity



Software

Software:

- > Compliant with Standards like: USB3, CoaXPress, GigE Vision, GeniCam, Camera Link or PoCL and PoE
- > Homogeneous for all SVCam Products

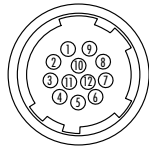


Supported Features and Technologies:

- > Progressive Scan CCD sensors (VGA up to 47 MP)
- > Global Shutter CMOS sensors
- > CCD sensors with advanced Tap Balancing (manual or automatic)
- > Monochrome and Color Versions (Bayer Pattern)
- > White balance for color versions (one push, continuous or manual)
- > programmable logic I/O functionality with timers
- > User-definable AOI (Area of Interest)
- > Partial Scan Modes
- > Decimation Modes for higher frame rates
- > Selectable Data- and Frame- Rate
- > Flat Field Correction
- > Shading Correction
- > Defect Pixel Correction
- > Adjustable Gain and Offset
- > Auto-Exposure and Auto-Gain
- > Image Flip on the FPGA
- > Look-Up-Table for Digital Resolution Mapping
- > Exposure controlled by Trigger, manually or automatically
- > 8 or 12 Bit Video Data Stream (14 Bit on the ADC)
- > Wide Range Power Conditions: 10 - 25 V DC
- > Various Trigger (int./ext./free running) and Exposure Modes
- > Programmable Sequencer for Shutter and Light Intensity
- > Pulse-Width Strobe-Control
- > Logical Trigger Functions
- > Schmitt-Trigger (Debouncer)
- > Particle Image Velocimetry (PIV-Mode)
- > Built-in LED Controllers
- > Versatile I/O-Concept:
 - Configurable I/O-Matrix
 - up to 4 x Trigger Input
 - up to 4 x Power Output (open drain)
 - Differential RS-422 and serial RS-232 In- and Out-put
- > GigE or Dual GigE Interface
- > Camera Link Interface
- > USB3 Interface
- > CoaXPress Interface
- > GigE Vision and GenICam Standard Compliant
- > Support for all Lens Mount Standards
- > Micro-Four-Thirds Bayonet (MFT) Standard supported
- > Prepared for Lens-Tilt Unit
- > Operating Temperature Range from -10°C to +45°C (ambient)
- > SDK for Windows (32/64 Bit) and Linux available
- > Intuitive Graphical User Interface
- > Power over Camera Link (PoCL)
- > Power over Ethernet (PoE) on request

Industrial Connectivity:

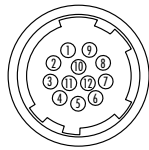
Hirose for ECO, ECO2, EVO Series



1	V In- (Gnd)	7	Out 1 (open drain)
2	V In+ (10 - 25V DC)	8	Out 2 (open drain)
3	RXD (RS232)*	9	In 3+ (RS422)
4	TXD (RS232)*	10	In 3- (RS422)
5	In 1 (0 - 24V)	11	Out 3+ (RS422)
6	In 2 (0 - 24V)	12	Out 3- (RS422)

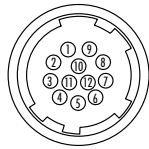
*notavailable for PoE versions

Hirose for EXO, HR (CL full, CXP), SHR Series



1	V In- (Gnd)	7	Out 1 (open drain)
2	V In+ (10 - 25V DC)	8	Out 2 (open drain)
3	In 4 (RXD RS232)	9	In 3+ (opto In +)
4	Out 4 (TXD RS232)	10	In 3- (opto In -)
5	In 1 (0 - 24V)	11	Out 3 (open drain)
6	In 2 (0 - 24V)	12	Out 0 (open drain)

Hirose 4 I/O for option ECO

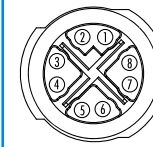


1	V In- (Gnd)	7	Out 1 (open drain)
2	V In+ (10 - 25V DC)	8	Out 2 (open drain)
3	not connected	9	In 3 (0 - 24 V)
4	not connected	10	In 4 (0 - 24 V)
5	In 1 (0 - 24V)	11	Out 3 (open drain)
6	In 2 (0 - 24V)	12	Out 4 (open drain)



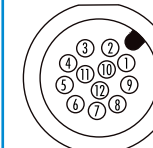
"High-quality cameras, components and expertise from SVS-Vistek form reliable elements of your own application. We are committed to ensuring this and will be pleased to provide experts to support you during the entire design-in process."

Industrial Ethernet M12



Color	Pin	Pin RJ45
White	1	1
Orange	2	2
Green	3	3
Blue	4	4
White/Blue	5	5
Green	6	6
White/Brown	7	7
Brown	8	8

Industrial M12 - I/O Connector



Color	Pin	Pin
Brown	1	VIN+ (10V to 25V DC)
Blue	2	VIN- (GND)
White	3	RXD (RS232)*
Green	4	TXD (RS232)*
Pink	5	IN1 (0-24V)
Yellow	6	IN2 (0-24V)
Black	7	OUT1 (open drain)
Grey	8	OUT2 (open drain)
Red	9	IN3+ (RS422)
Purple	10	IN3- (RS422)
Light Grey	11	OUT3+ (RS422)
Light Blue	12	OUT3- (RS422)

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