Industrial Cameras

SVCam-Product Line made by SVS-Vistek

02/2017

SVS-VISTEK

Feature List

Camera Concept

by SVS-Vistek

"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."

DESIGN-IN GUARANTEE

Feature List

Sensor

	ECO	ECO²	EXO	EVO	HR	SHR
	0.3 to 5 Mpixel CCD	1 to 12 Mpixel CCD	2.3 to 12 Mpixel CMOS and CCD	1 to 12 Mpixel CMOS and CCD	10 to 29 Mpixel CMOS and CCD	47 Mpixel CCD
	Sony 1 tap sensors	Sony ON Semiconductor	Sony, ON Semi and CMOS	Sony On Semiconductor	ON Semiconductor	ON Semiconductor
		1 and 2 tap sensors	1,2 and 4 tap / 8 ohm sensors	1,2 and 4 tap / 12 ohm sensors	4 tap / 32 channel sensors	16 (8 x 2) tap sensor
	mono and color versions					
	progressive scan or global shutter (image on demand)					

Camera Hardware Features

GigE Vision up to 120 MB/s	GigE Vision, Camera Link or USB3 Vision	PoCL (Power over Camera Link)	Dual GigE Vision or Camera Link Medium	Dual GigE Vision, Camera Link or 4 x CoaXPress	Camera Link or 2 x CoaXPress
64 MB internal memory	256 MB internal memory	C, Mount or MFT	128 MB internal memory	128 / 256 / 512 MB L mem.	256 / 512 MB L memory
8 or 12 bit pixel format		C Mount or MFT	PoCL, PoCXP	PoCL, PoCXP	PoCL, PoCXP
C or CS Mount	C Mount	optional Dynamic Lens Control available	Lens Mount Adapters available	M58 Mount (FFD 11.48)	M72 Mount (FFD 19.55)
38 x 38 x 33 mm	38 x 38 x 33 mm	50 x 50 x (43-47) mm	50 x 50 x 46 mm		
	38 x 38 x 45 mm	precision machined housing	70 x 71 x 55 mm	80 x 80 x 60 mm	
IP Class up to IP67					
manual or auto tap balancing					
			pixel clock setting for Camera Link		

Camera Firmware Features

2 x 2 binning			2 x 2 binning (4 x 4 for CL)		2 x 2 binning
horizontal and vertical image flip	custom defect pixel correction - custom defect pixel mapping				
AOI / ROI (area of interest / region of interest)	sliding correction for GigE Vision				
read out control - custom acquisition timing (manual or delayed)					
while balance (manual / auto)					
exposure time control (manual, auto or external)					
gain (manual or auto)					
adjustable offset					
PIV - particle image velocimetry (CCD sensors only)					
LUT (look up table) - custom pixel mapping					
trigger mode (internal, software or external)					
integrated temperature sensor - SDK accessible					

I/O Features

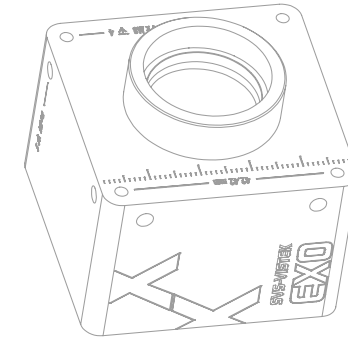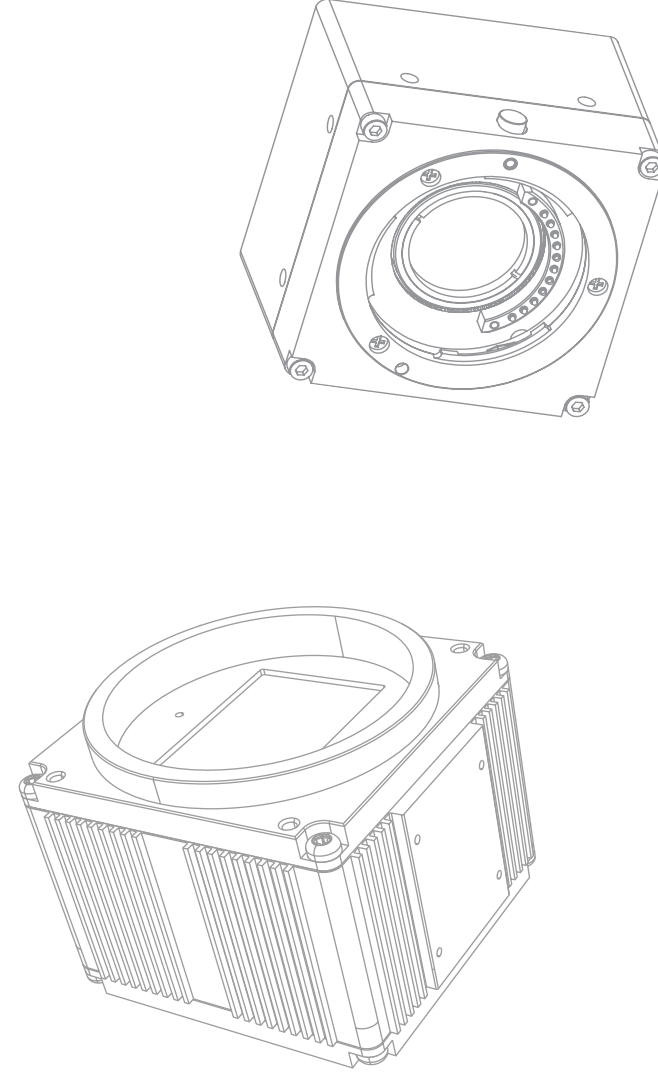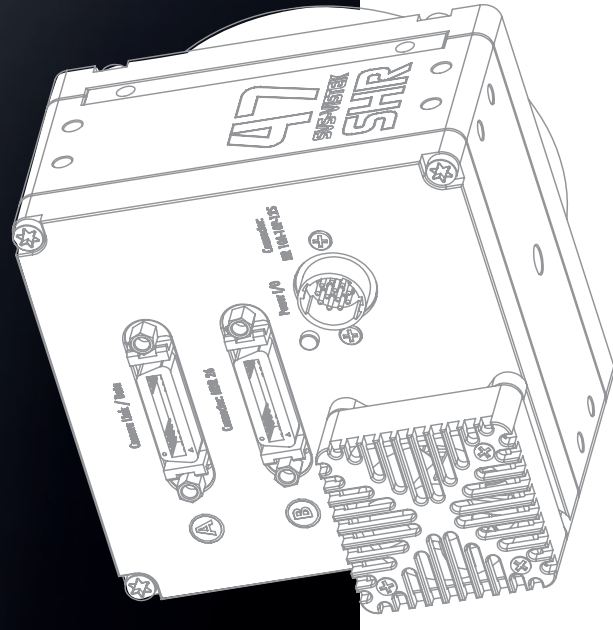|						
up to 4 x open drain outputs	4 x open drain outputs		up to 4 x open drain outputs		4 x open drain outputs
strobe controller - in-camera LED light driver/controller, up to 3 A - easy synchronization					
sequencer - up to 16 programmable intervals with individual exposure and strobe out					
programmable logic I/O functionality with timers					
PWM - high frequency pulse with modulation					
signal safe through high-low filter, debounce and prescaler for trigger input					
versatile I/O concept: 24V signal levels - RS232 / RS422 differential signal					

Standards

GenICam compatible					
compatible with most 3rd party software					

GigE · USB3 · Camera Link · CXP · (various logos)

Camera Concept

Design
> Flexible and scalable with identical connector pinout in all camera series
> Individual custom OEM designs for system integrators
> Industrial long-term support of cameras
> Wide power supply range 10 – 25 V

Engineering and Production
> Excellent optical precision
> Precise and rugged long life mechanical design
> Advanced temperature management
> Industrial protection class up to IP67

Solid I/O Concept
> Hirose and industrial M12 connectors
> Configurable I/O matrix
> Up to 4 x power PWM OUT max 3 A
> Up to 4 x trigger IN, TTL-24V
> Up to 2 x optical IN
> RS232 or RS422 IN/OUT

Unique Features
> PWM power drives for LED lights (LED)
> Programmable sequencer for shutter and LEDs (SEQ)
> Burst mode (BST)
> Safe trigger (STI)
> Dynamic lens control (MFT)

LED · SEQ · STI · BST · PLC

Software
> Works with any GenICam camera
> Windows, Linux and macOS supported
> Compliant with standards like USB3 Vision, CoaXPress, GigE Vision, GenICam, Camera Link
> GenICam transport Layer for out-of-the-box compatibility to nearly all Machine Vision software like: CVB, HALCON, MERLIC, openCV, mVision, eyeVision, COGNEX VisionPro, Matrox, MIL, LabView, VisionBuilder, StreamPix, eBUS SDK and many others

input 3 · input 1 · input 2 · input 0 · debouncer · trigger · next module · debouncer configuration (time)

Industrial Connectivity:

Hirose for ECO, ECO2, EVO, EVO, HR (CL medium and GigE only)

Pin			Pin		
1	V In-	(Gnd)	7	Out 1	(open drain)
2	V In+	(10 – 25V DC)	8	Out 2	(open drain)
3	RXD	(RS232)*	9	In3-	(RS422)
4	TXD	(RS232)*	10	In3-	(RS422)
5	In 1	(0 – 24V)	11	Out 3-	(RS422)
6	In 2	(0 – 24V)	12	Out 3-	(RS422)

*selectable for PoE versions

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

Pin			Pin		
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	In3-	(opto In -)
4	Out 4	(TXD RS232)	10	In3-	(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

Pin			Pin		
1	V In-	(Gnd)	7	Out 1	(open drain)
2	V In+	(10 – 25V DC)	8	Out 2	(open drain)
3	not connected		9	In3	(0 – 24 V)
4	not connected		10	In4	(0 – 24 V)
5	In 1	(0 – 24V)	11	Out 3	(open drain)
6	In 2	(0 – 24V)	12	Out 4	(open drain)

Industrial Ethernet M12

Color	Pin	Pin RJ45
WH/OG	1	1
OG	2	2
WH/GN	3	3
BU	4	4
WH/BU	7	5
GN	5	6
WH/BN	6	7
BN	8	8

Industrial M12 - I/O Connector

Color	Pin		
BN	1	VIN-	(10V to 25V DC)
BU	2	VIN-	(GND)
WH	3	RXD	(RS232)*
GN	4	TXD	(RS232)*
PK	5	IN1	(0-24V)
YE	6	IN2	(0-24V)
BK	7	OUT1	(open drain)
GY	8	OUT2	(open drain)
RD	9	IN3+	(RS422)
GY/RD	10	IN3-	(RS422)
BU/RD	12	OUT3-	(RS422)

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)
> Destination 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-Tables for Digital Resolution Mapping
> Exposure controlled by Trigger, manually or automatically
> 8 or 12 Bit (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 strobe
> 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 RS232 In- and Output
> 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
> Power over CoaXPress (PoCXP)

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

ECO Series
VGA TO 5 MEGAPIXEL

ECO GigE Vision Cameras

Unsurpassed flexibility with great performance and affordability. This characterizes the ECO series best. You will find all popular CCD-Sensors from Sony in the ECO series. 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 ECO series opens up new dimensions for integration into your application SW-Environment.

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	max. Frame Rate [fps] GigE	BlackLine 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 Series
1 TO 12 MEGAPIXEL

ECO² GigE Vision Cameras

The 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 used. The robust 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.

Special Features of the ECO² Series:
> Progressive Scan Sensors
> 2 x direct drive and control of LED lighting
> GigE Vision and GenICam 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	max. Frame Rate [fps] GigE	BlackLine 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"	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 Series
2.3 TO 20 MEGAPIXEL

The EXO Concept

The EXO series is the perfect choice for system integrators with ever changing tasks. Simple and scalable integration with maximum functionality was our objective. The aluminum housing is precisely machined with excellent thermal and mechanical properties and creates the platform for a complete offering of sensors and interfaces. A wide range of the latest CMOS and CCD sensors from SONY, On Semiconductor and CMOSIS makes it easy to select the right camera for virtually any application. On the interface side the choices are free between GigE Vision, Camera Link Base or USB3.0.

All SVCam models incorporate the same full set of features – a highlight is the ability to control and power independent 4 LED lights – all 4 lights individually controlled by the camera.

Special Features of the EXO Series:
> Sensors from Sony, ON Semi and CMOSIS
> Global Shutter CCD and CMOS
> 2.3 to 20 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)

EXO Camera Link Cameras

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

1) With Tap Configuration 1X3-1Y it is possible to increase the framerate [fps] by 50%. The EXO 174 CL for example can make up to 100 fps.

EXO GigE Vision Cameras

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 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 and trigger the camera through a single interface connection 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

Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	max. Frame Rate [fps] GigE	Camera Link	USB3
exo174	2.3	1,920 x 1,200	1/1.2"	Sony IMX174	5.86	CMOS	C	49	70 1)	31
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 1)	115
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	32 1)	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 1)	25
exo814	9	3,360 x 2,712	1"	Sony ICX814	3.69	CCD	C	-	18 1)	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	18 1)	28
exo253	12	4,096 x 3,000	1"	Sony IMX253	3.45	CMOS	C	-	-	30
exo304	12	4,096 x 3,000	1"	Sony IMX304	3.45	CMOS	C	9	13 1)	23
exo834*	12	4,242 x 2,830	1"	Sony ICX834	3.1	CCD	C	-	14.5 1)	14.5
exo183*	20	5,496 x 3,672	1/2.3"	Sony IMX183	2.4	CMOS	C	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	31 1)	65

1) up to 50% higher frame rates with certain frame grabber   * preliminary

EVO Series
1 TO 12 MEGAPIXEL

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 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

Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	max. Frame Rate [fps] GigE	Camera Link
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	-

Tracer Series
1 TO 12 MEGAPIXEL WITH MFT BAYONET

(new)

Tracer GigE Vision Cameras

These cameras combine the outstanding features of the EVO and EXO 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 Tracer Series:
> Micro-Four-Thirds bayonet mount
> Fast user control of zoom, aperture and focus
> Lens settings controlled by Ethernet interface
> Data interface: Dual GigE (EVO) / GigE (EXO)
> User selectable AOI (Area Of Interest)
> SDK for Windows (32/64bit) and Linux available
> frame buffer: 64 MB (EXO) / 128 MB (EVO)
> Dimensions EVO [mm]: 58 x 58 x 59
> Dimensions EXO [mm]: 58 x 58 x 45

EXO Tracer   EVO Tracer

Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	max. Frame Rate [fps] GigE
exo304 TR	12	4,096 x 3,000	1.1"	SONY IMX 304 LQR	3.45	CCD	MFT	9

Model	[MP]	Resolution [Pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	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 Series
UP TO 29 MEGAPIXEL

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
> AOI (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.

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 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 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 industrial customers.

Model	[MP]	Resolution [pixel]	Format	Sensor	Pixel [µm]	Architecture	Mount	max. Frame Rate [fps] GigE	Camera Link	CoaXPress
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	43.3 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 Series
47 MEGAPIXEL

SHR Camera Link Cameras

Enhance existing Camera Link architectures seamlessly, the SHR significantly boost bandwidth capability with the Camera Link 80-bit Deca 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 is expanding horizons 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
> 512 MB frame buffer

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

(new)