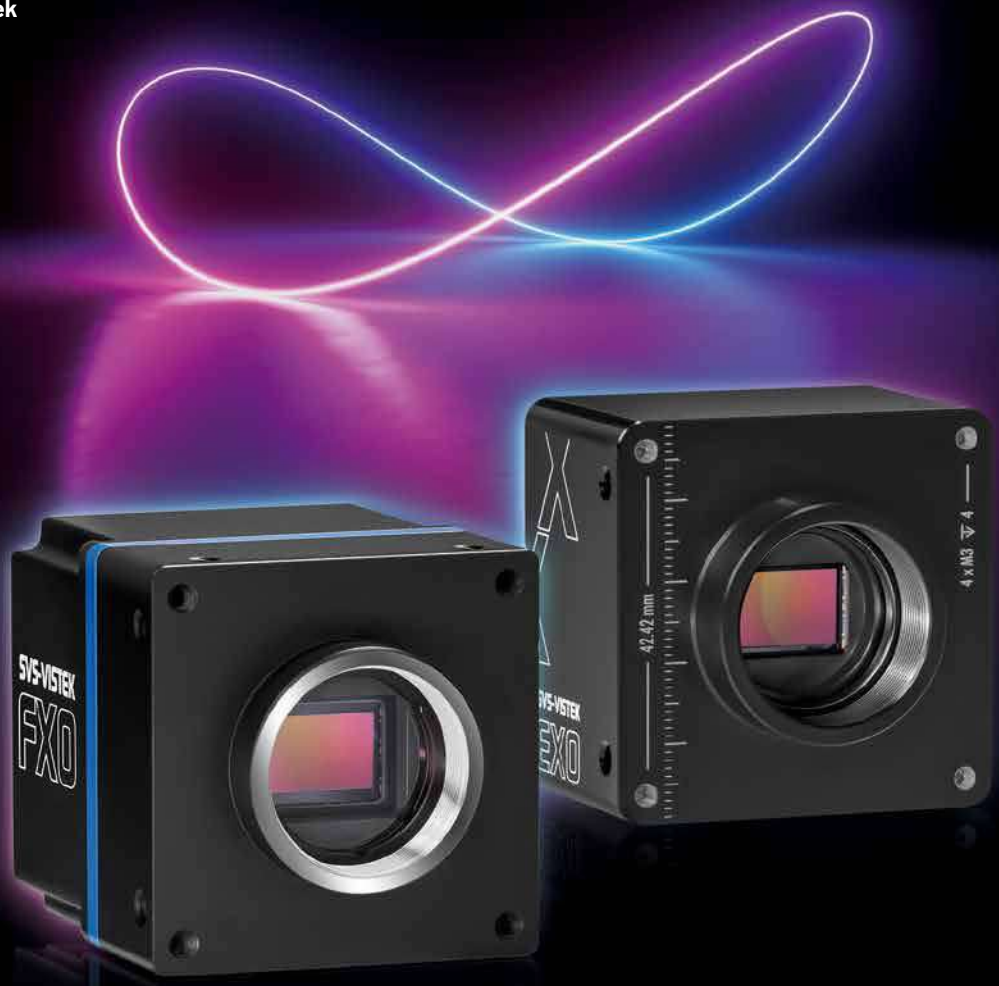
SVS-VISTEK

2024 | 01

Inspect the Invisible with UV, SWIR and Polarized cameras

made by SVS-Vistek



UV ULTRAVIOLET WAVELENGTH

SWIR SHORT WAVELENGTH INFRARED

POL POLARIZED WAVELENGTH

USB3 VISION · GigE VISION · 10GigE VISION · CXP-12 · CoaXPress The next generation digital interface

A TKH TECHNOLOGY COMPANY

Scale your vision

SWIR
SHORT WAVELENGTH INFRARED

SWIR Cameras

Short Wave Infrared (SWIR) sensors from Sony with the latest technology. The sensors impress with an extremly wide spectral bandwidth that extends to the visible spectrum. Typical applications: Visualization of liquids, foreign materials, transmission inspection of semiconductors or temperature. Reliable inspection solutions in the glass, wafer and food sectors.

Special Features of our SWIR Cameras:

- Small pixels, high sensitivity
- Sensitive for wavelengths from 400–1,700 nm
- High homogeneity with high dynamic range
- For fxo992 and fxo993 TEC and TECless option

								10GigE	GigE	CXP-12	USB3
Model	[MP]	Resolution	Format	Sensor	Pixel [µm]	Architecture	Mount	fps			
exo991	0.3	640 x 512	1/4"	Sony IMX991	5	CMOS	C	-	260	-	-
exo990	1.3	1,280 x 1,024	1/2"	Sony IMX990	5	CMOS	C	-	94.4	-	125.4
fxo990	1.3	1,280 x 1,024	1/2"	Sony IMX990	5	CMOS	C	-	-	134	-
fxo993	3.1	2,048 x1,536	8.9 mm	Sony IMX993	3.45	CMOS	C	173.4* NEW	-	137.4* NEW	-
fxo992	5.2	2,560 x 2,048	11.4 mm	Sony IMX992	3.45	CMOS	C	132* NEW	-	132* NEW	-

*also available with built-in thermoelectric cooler (TEC)

UV
ULTRAVIOLET WAVELENGTH

Ultraviolet Cameras

Our ultraviolet cameras are based on the proven design of the FXO series. Two fast CoaXPress12 Connections, or a 10GigE interface provide the camera with outstanding properties in terms of trigger latency and high data rate. The Sony Pregius UV image sensors are characterized by high resolution and sensitivity.

Special Features of our UV Cameras:

- LUT, Binning, ROI
- Electrical and optical inputs
- Industrial TTL-24V I/O interface with SafeTrigger, logic functions, programmable sequencers and timers, RS232 interface, integrated 4-channel strobe controller

								10GigE	CXP-12
Model	[MP]	Resolution	Format	Sensor	Pixel [µm]	Architecture	Mount	fps	
fxo487	8.1	2,840 x 2,840	2/3"	Sony IMX487	2.74	CMOS	C	87	87	195*

* CoaXPress12 with 2 Connections

POL
POLARIZED WAVELENGTH

Polarized Cameras

The Sony Polarsens sensors allow a reliable and very fast inspection of non-metallic surfaces and structures that are otherwise difficult to inspect. We provide a tool kit for easy start-up and implementation of our camera. Typical applications: The inspection of surfaces, reflective materials and tension analysis.

Special Features of our Polarized Cameras:

Simultaneous measurement of

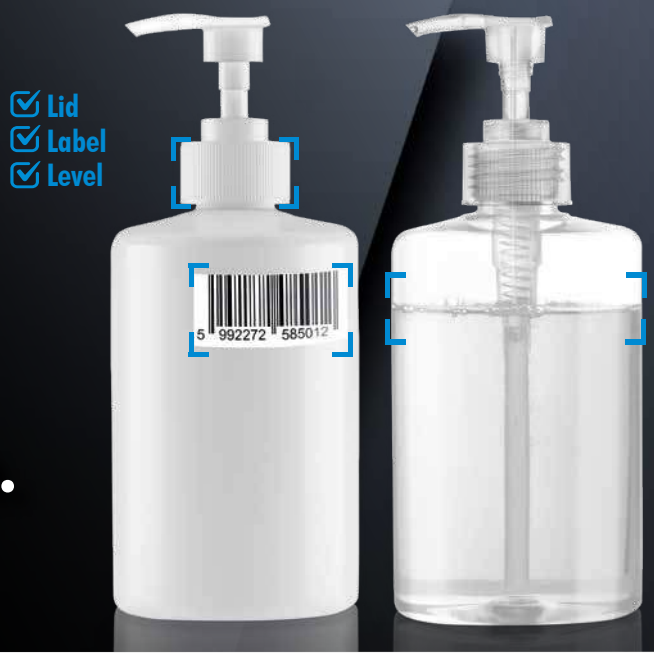
- degree of polarization
- direction of polarization
- intensity

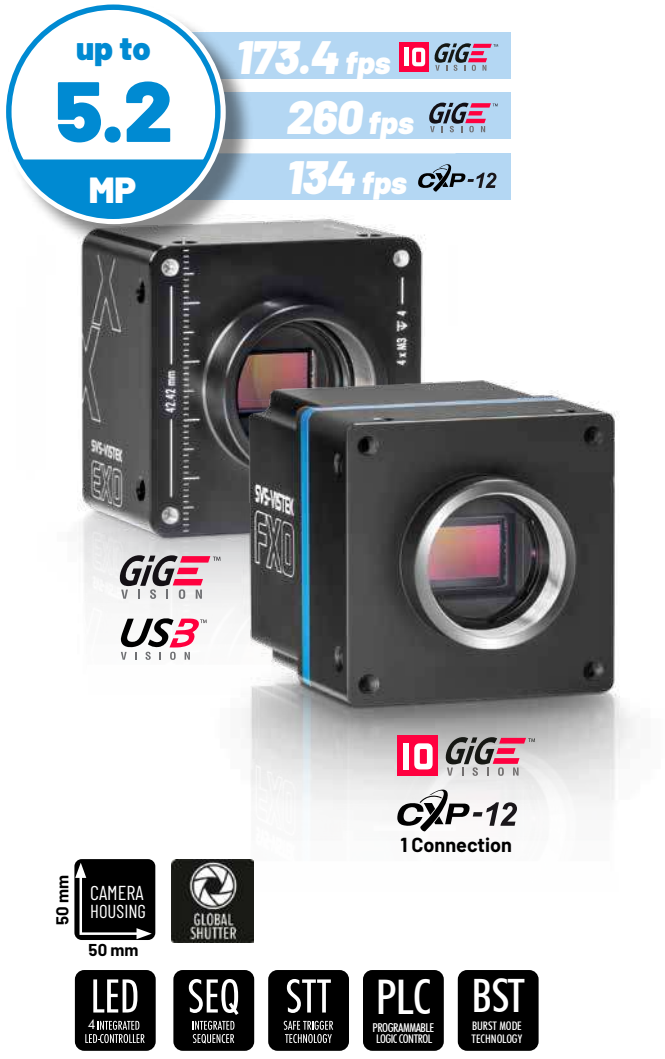
								GigE	USB3
Model	[MP]	Resolution	Format	Sensor	Pixel [µm]	Architecture	Mount	fps	
exo264	5	2,448 x 2,048	2/3"	Sony IMX264MZR	3.45	CMOS pol.	C	24.5	35
exo250	5	2,448 x 2,048	2/3"	Sony IMX250MZR	3.45	CMOS pol.	C	24.5	75
exo253	12.3	4,096 x 3,000	1.1"	Sony IMX253MZR	3.45	CMOS pol.	C	10	30

SWIR cameras

See beyond the surface with SWIR inspection.

e.g. bottle inspection





SWIR
SHORT WAVELENGTH INFRARED

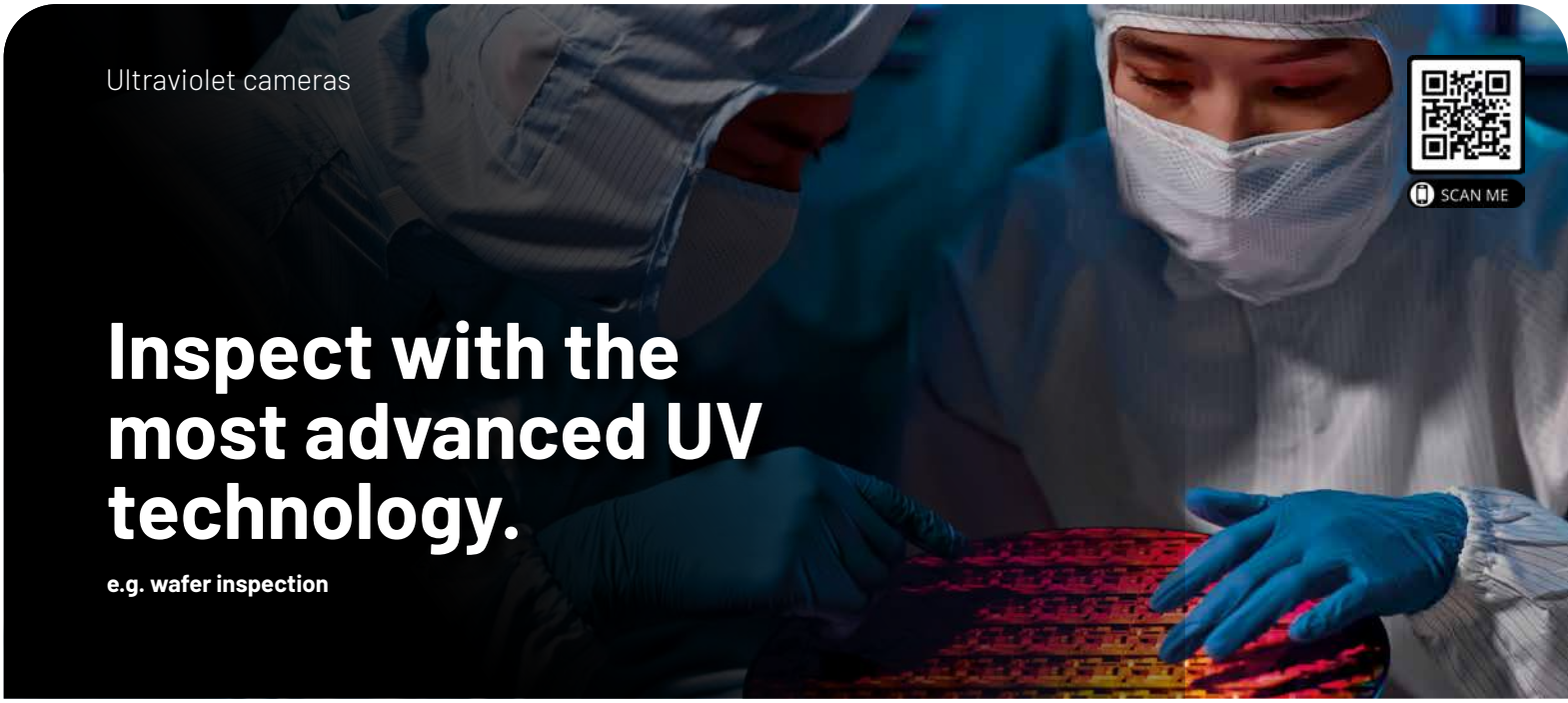
Sensors with high SWIR wavelength sensitivity in EXO & FXO cameras.

SVS-Vistek has launched SWIR cameras in the EXO & FXO series, which come with the Sony SenSWIR sensor, optional for FXO with or without thermoelectric cooling (TEC). These cameras have the exceptional capability to capture a vast spectrum of wavelength ranging from 400 to 1,700 nm. This characteristic offers valuable benefits for a multitude of applications.

They also come with state-of-the-art features like increased dynamic range, best image homogeneity with non-uniformity correction, industrial design with GenTL drivers, an integrated power multi-channel strobe controller and economical GigE as well as CoaXPress-12 interface is allowing up to 260 fps.

SWIR (Short Wave Infrared) inspection systems have become established solutions in various applications such as wafer inspection, teperature observations and locating contamination in food products. SWIR is also successful in identifying materials, chemicals, and detecting moisture or liquids.

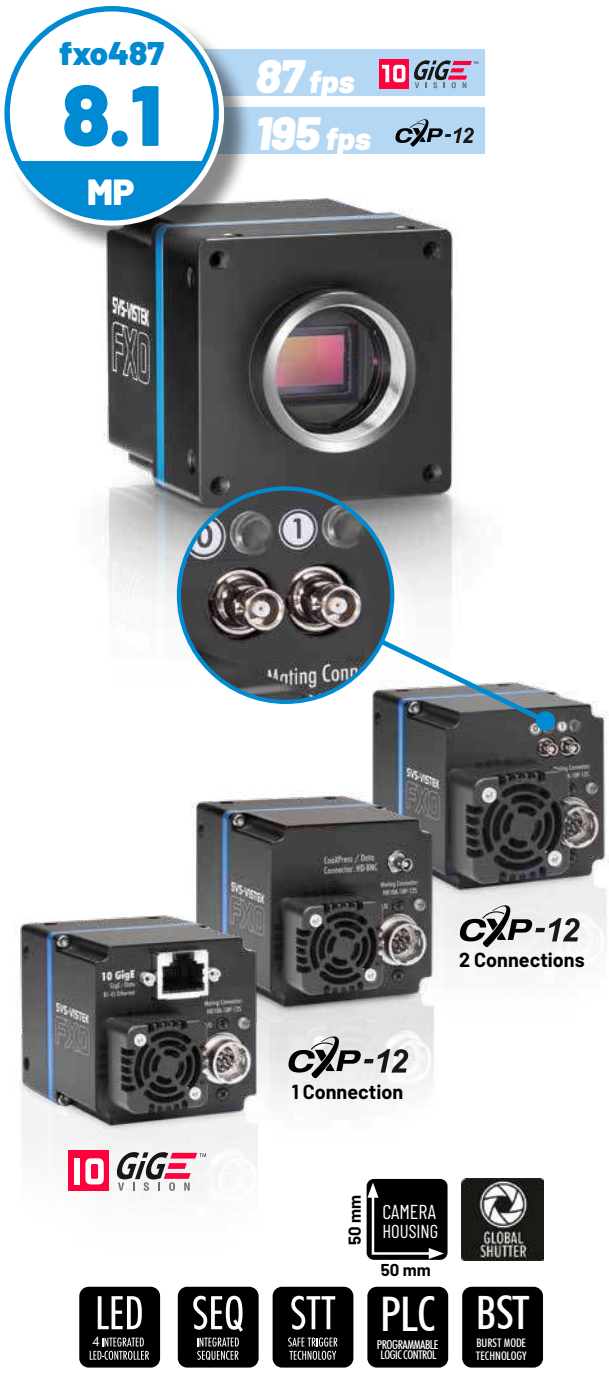
- Sony SenSWIR sensor with 400-1,700 nm spectral sensitivity and high quantum efficiency
- Advanced Two-Point NUC (Non Uniformity Correction)
- CoaXPress-12 delivers lowest latency and highest speed
- 10GigE for economical bandwidth and ease of integration
- LUT, Binning, ROI, Burst Mode
- Up to 65°C (140°F) operating temperature
- Industrial TTL- 24V I/O interface with SafeTrigger, logic functions, programmable sequencers and timers, RS232 interface, electrical and optical inputs, GenICam and GenTL



SCAN ME

Inspect with the most advanced UV technology.

e.g. wafer inspection



LED 4 INTEGRATED LED-CONTROLLER
SEQ INTEGRATED SEQUENCER
STT SAFE TRIGGER TECHNOLOGY
PLC PROGRAMMABLE LOGIC CONTROL
BST BURST MODE TECHNOLOGY

UV
ULTRAVIOLET WAVELENGTH

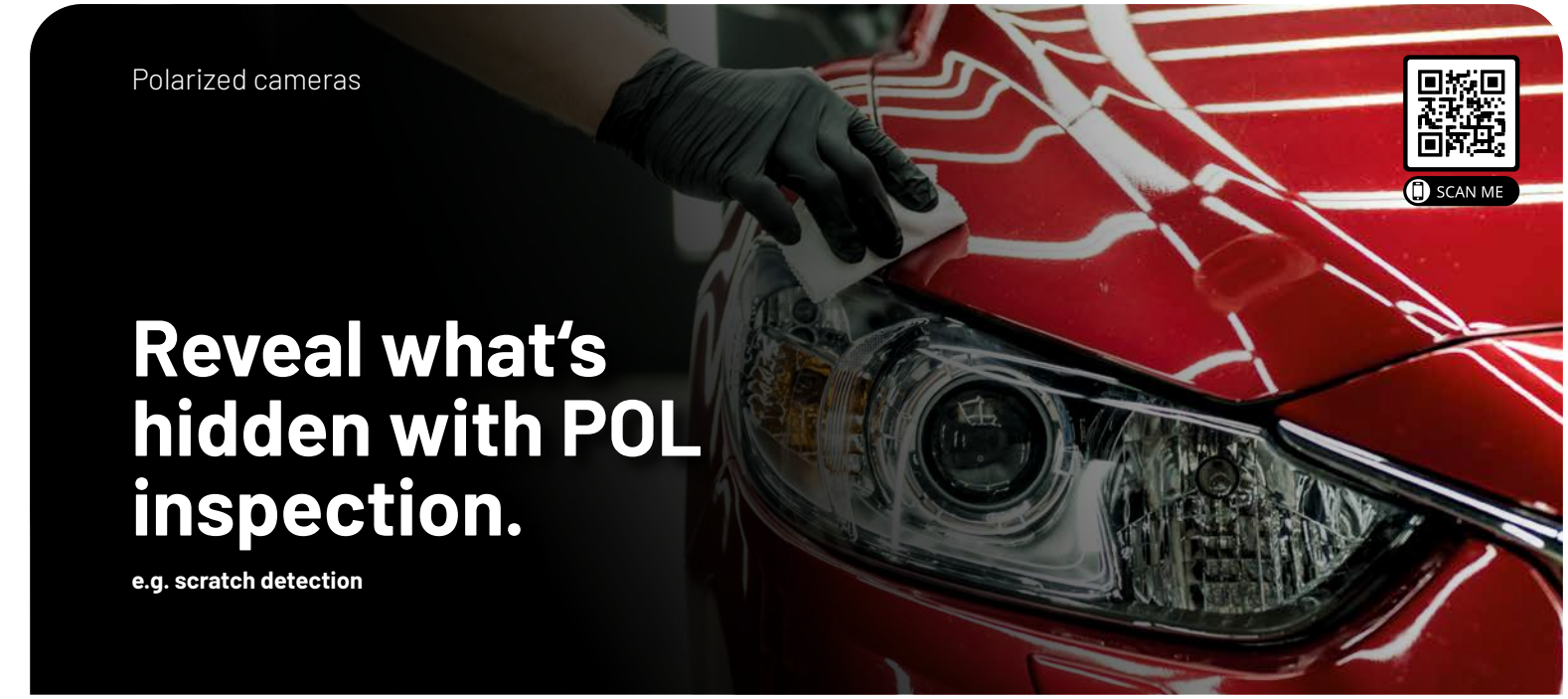
UV sensor, 2 CXP-12 Connections and the world's most compact housing - FXO.

The fxo487 UV camera is an ideal solution for demanding industrial inspection tasks in the ultraviolet wavelength range due to its high level of UV sensitivity. With an 8.1 megapixel resolution and a maximum frame rate of up to 195 frames per second, it is capable of capturing detailed and fast moving objects in the the UV wavelength range of 200 to 400nm.

The FXO UV cameras offers High-Speed data transfer with 2 CoaXpress-12 Connections. In addition the compact design makes it the smallest camera available in its category worldwide.

SVS-Vistek also provides lenses that are compatible with the UV camera, covering a wide range of wavelength from visible to UV light. This camera enables various applications in industries such as battery, semiconductor, glass, recycling, gemstone, and automotive, making it a versatile and robust solution for industrial image processing.

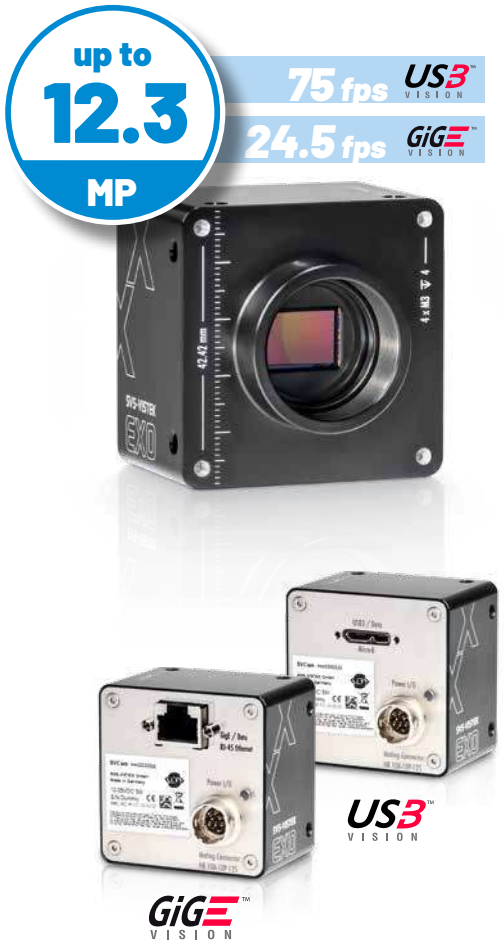
- Sensitivity in the wavelength range of 200–780 nm
- GenICam 3.0 Software interface, GenTL
- Interfaces: 10GigE, 1 CXP-12 Connection, or 2 CXP-12 Connections
- LUT, Binning, ROI
- Electrical and optical inputs
- Up to 65°C operating temperature
- Industrial TTL-24V I/O interface with SafeTrigger, logic functions, programmable sequencers and timers, RS232 interface, integrated 4-channel strobe controller



SCAN ME

Reveal what's hidden with POL inspection.

e.g. scratch detection



50 mm CAMERA HOUSING 50 mm

LED 4 INTEGRATED LED-CONTROLLER
SEQ INTEGRATED SEQUENCER
STT SAFE TRIGGER TECHNOLOGY
PLC PROGRAMMABLE LOGIC CONTROL
BST BURST MODE TECHNOLOGY

POL
POLARIZED WAVELENGTH

Polarized EXO cameras with integrated Global Shutter.

The use of Polarized cameras brings several advantages in various applications. One of the main benefits is the ability to reduce glare and reflections from objects, which improves image quality and visibility. This is especially useful in outdoor or high-contrast environments where direct sunlight or other light sources can create unwanted reflections.

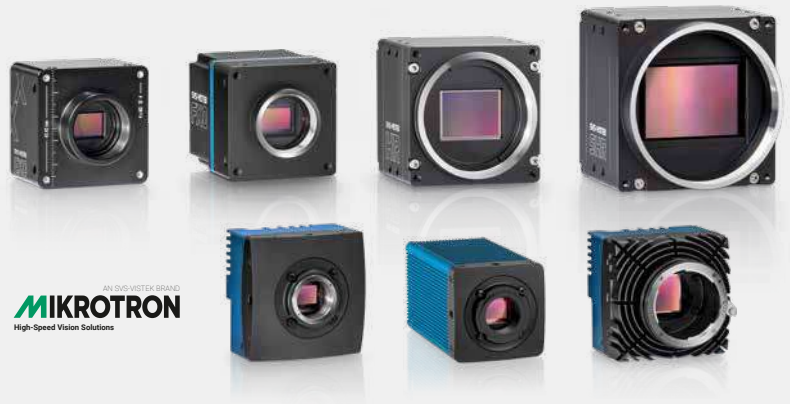
Polarized cameras also enable the detection and analysis of subtle changes in polarization properties, which can provide valuable information in scientific research, quality control processes, and industrial inspections. For example, in material inspection, Polarized cameras can reveal hidden defects, such as stress patterns or material composition variations, that are not visible to regular cameras.

Despite its specialized sensors, our Polarized EXO cameras can be used with standard industrial lenses. The integrated 4-channel Strobe Controller supports complex lighting situations.

- GenICam 3.0, GigE Vision and USB3 interface
- LUT, ROI, Burst Mode
- Electrical and optical inputs
- Up to 60°C operating temperature
- Integrated 4-channel strobe controller
- Industrial TTL-24V I/O interface with SafeTrigger, logic functions, programmable sequencers and timers, RS232 interface

SVS-VISTEK

Visit us on our homepage **www.svs-vistek.com**
We offer a wide range of industrial vision cameras and components.



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