Seeing **beyond**



Designed for detail. Built for throughput.

ZEISS Axiocam 925 mono

zeiss.com/axiocam925-mono

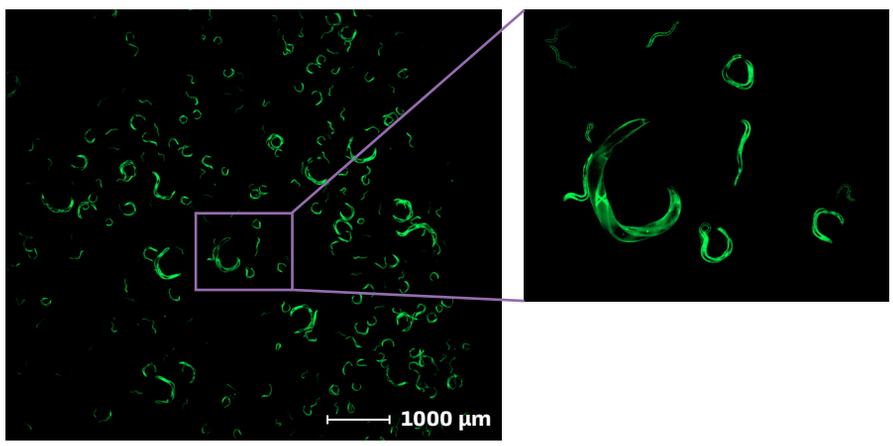
ZEISS

ZEISS Axiocam 925 mono

25-megapixel camera for high-throughput, large-field fluorescence imaging

Axiocam 925 mono is designed for researchers who need to capture more information without compromise. Its 25-megapixel back-illuminated Global Shutter CMOS sensor combines a large 19.3 mm field of view with high sensitivity and fine spatial resolution.

Whether imaging large tissue sections, monitoring dynamic cellular processes, or detecting weak fluorescence signals, Axiocam 925 mono delivers the performance required for demanding scientific workflows.



Wide-field fluorescence image of C. elegans population expressing GFP in the body-wall muscles. The animals exhibit a rolling phenotype due to a mutation linked to the transgene. Courtesy of Dr. André Franz, CECAD Research Center, Institute for Genetics, University of Cologne, Germany.

The combination of high quantum efficiency, low-noise image acquisition, and fast data transfer enables efficient imaging of large specimen areas while preserving the details needed for quantitative analysis. Seamlessly integrated into the ZEISS imaging ecosystem, Axiocam 925 mono helps you move faster from overview to insight.

Imaging large sample areas typically involves balancing field of view, image resolution, and acquisition speed. Axiocam 925 mono helps reduce this trade-off.





Its large-format sensor captures more sample area in a single image while maintaining the detail required for quantitative analysis. The result is fewer image tiles, faster acquisitions, and more efficient workflows. Whether documenting large tissue sections, screening multi-well plates, or imaging complex biological structures, Axiocam 925 mono helps you capture more information in every frame.

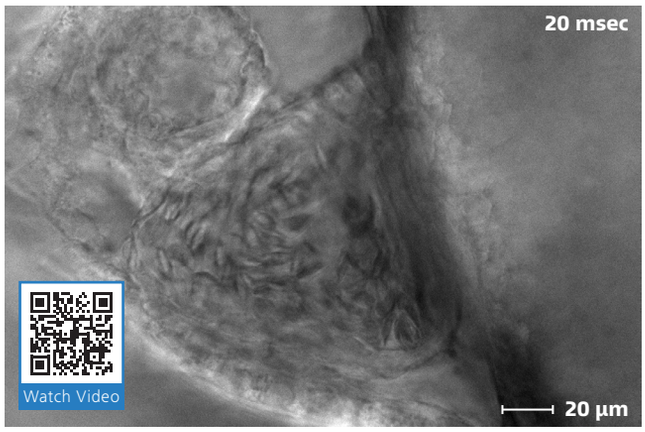
Fluorescence imaging often depends on detecting signals that are barely distinguishable from background noise. Axiocam 925 mono combines a back-illuminated sensor architecture with a quantum efficiency of 86% at 460 nm. This helps you collect more photons and improve signal quality. It supports the reliable detection of weak fluorescence signals and imaging conditions that help preserve sensitive biological specimens.

Capturing weak signals
From low-expression fluorescent proteins to challenging multichannel experiments, Axiocam 925 mono delivers the sensitivity required for demanding research applications.

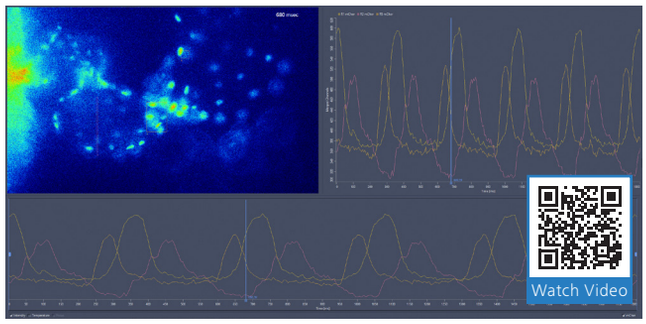
Imaging dynamic biological processes
From intracellular transport to cell migration and developmental dynamics, many experiments require accurate imaging of rapidly changing events. The global shutter architecture of Axiocam 925 mono enables distortion-free image acquisition by capturing every pixel simultaneously. The result is reliable imaging of moving specimens and dynamic processes without the artifacts associated with rolling shutter technologies.

Streamlining workflows
Axiocam 925 mono is designed for researchers who need to increase productivity without sacrificing image quality. The combination of high resolution, a large field of view, high sensitivity, and fast data acquisition enables efficient imaging of large sample areas and high-content experiments.

Acquire more information per image. Reduce acquisition time. Increase throughput.
The fastest path to discovery begins with capturing the right data.



High-speed brightfield imaging of the beating zebrafish heart at 50 hpf (hour post-vertilization). The high spatiotemporal resolution enables visualization of fine cardiac dynamics at 240 frames per second. Sample courtesy: Dr. Radhan Ramadass and Daiki Sugita, Max Planck Institute of Heart and Lung Research, Bad Nauheim, Germany.



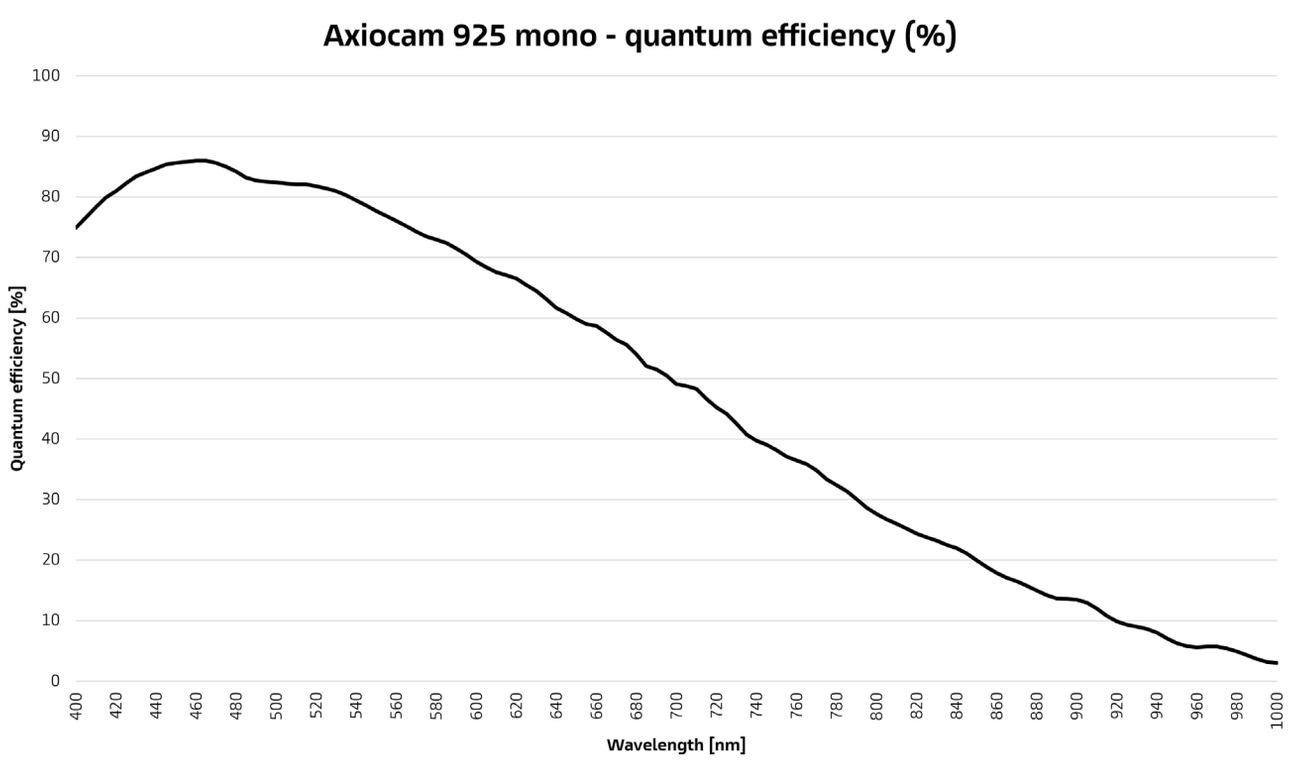
Quantitative live fluorescence imaging of a mCherry-labeled zebrafish heart. Simultaneous intensity analysis of multiple regions of interest enables real-time visualization and quantification of cardiac contraction dynamics. Sample courtesy: Dr. Radhan Ramadass and Daiki Sugita, Max Planck Institute of Heart and Lung Research, Bad Nauheim, Germany.

Simpler. Smarter. More integrated.

- 25-megapixel back illuminated CMOS sensor with 19.3 mm diagonal
- 58 full-resolution images per second
- Small 2.74 µm pixels for resolving the finest details at all magnifications
- High 86% quantum efficiency facilitated by back illuminated sensor architecture for superior signal detection
- Low readout noise of 1.3 e- and additional high-quality noise-reduction technology for low-light imaging
- Distortion-free imaging of dynamic processes due to global shutter technology
- Very high data bandwith of 20 Gbit/s enables extremely fast image transfer to the application
- Smooth live imaging at 30 frames per second of the entire field of view
- Reproducible image quality with low noise, enabled by active thermal stabilization of the sensor
- Dynamic range of 1:25.000 in High-Dynamic Range (HDR) mode
- Hardware triggering

Recommended for:

- Demanding fluorescence applications in life sciences research
- Imaging faint fluorescence signals with a good signal-to-noise ratio
- Live-cell imaging and dynamic time series
- Flexible widefield setups requiring high resolution, a large field of view, high sensitivity, and high throughput



Technical specifications

Feature	
Sensor type	Sony CMOS image monochrome sensor, global shutter architecture
	Backside illuminated
Sensor size	Image diagonal 19.3 mm, equivalent to 1.2" sensor format
	Image field 14.6 mm × 12.6 mm
Sensor pixel count	5312 (H) × 4608 (V) = 24.5-megapixel
HW subsampling	2624 (H) × 2303 (V) = 6-megapixel, high speed full field of view mode
Pixel size	2.74 µm × 2.74 µm
Bit depth	14 bit/pixel, 12 bit/pixel, or 8 bit/pixel
Exposure range	0.1 ms up to 600 s
Gain	1×, 2×, 4×, 8×, 16×
Binning	1 × 1, 2 × 2, 3 × 3, 4 × 4, 5 × 5 (2 × 2 analog binning, other modes combined analog and digital binning)
Dark current signal	< 0.1 e- / p / s at 22°C sensor temperature
HDR mode	Extended dynamic range up to 1:25,000
Cooling system	Active thermoelectrical cooling with small fan, sensor temperature stabilized to 22 °C
Spectral sensitivity	App. 400 nm – 1000 nm, QE 86% at 460 nm
Interfaces	quad USB 3.1 Gen1 over two dual USB-C cables
Trigger port	Connector for trigger cable: Trigger-in, trigger out, ready
Power supply	By USB 3.1 Gen1 connections, power consumption 15 W max.
Operating system	Win 11 Enterprise and higher
Software	ZEN 3.15 (blue edition) and higher, ZEN core 3.15 and higher
Image enhancement functions	Denoising, sharpening, shading correction, dark current compensation
Automatic feature	Optional automatic exposure time adaption
Optical interface	C-mount
Dimensions and weight	10.8 cm × 7.8 cm × 6.1 cm / 700 g
Order number	Axiocam 925 mono: 426560-9210-000

Frame rate

Frame size H	V	FPS @ 1 ms up to	Remarks / mode / equivalent format
5312	4608	58	Full Frame (24.5 MP)
4480	4480	71	ROI (20 MP)
2624	2303	142	2×2 subsample/binning
2624	2303	143	ROI
2048	2048	158	ROI
1920	1072	281	ROI (HDTV, 2 MP)
1024	1024	282	ROI (1 MP)
512	512	336	ROI
128	128	477	ROI
2624	2303	30	Live image mode (full field of view)

Read noise (gain)	well capacity	Dynamic range
2.31 e- (1×)	10,000 e-	1:4,700
1.75 e- (2×)	5,000 e-	1:2,850
1.54 e- (4×)	2,500 e-	1:1,625
1.41 e- (8×)	1,250 e-	1:855
1.30 e- (16×)	625 e-	1:480
HDR mode	40,000 e-	1:25,000

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