

From Eye to Insight



## THE K8 SCIENTIFIC CMOS CAMERA

For Life Science Imaging Applications and Analysis

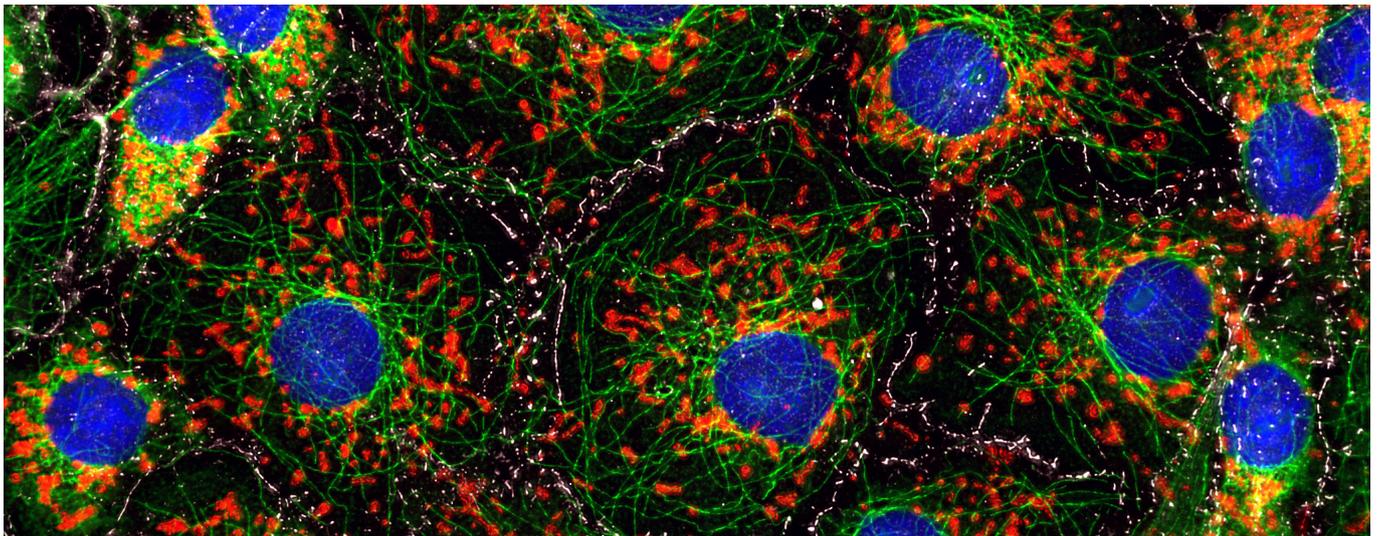


The K8 Scientific CMOS microscope camera offers a cutting-edge solution for the most challenging live-cell experiments. In an environment where sensitivity is everything, the K8 camera helps you capture more data from your sample, thanks to a 95% quantum efficiency (QE) back-thinned CMOS sensor.

The K8 allows you to capture razor-sharp THUNDER images even in extreme low light imaging conditions, helping you to realize the full potential of your system. The K8 camera's combination of extremely low read noise, minimal sensor artifacts and high QE allows you to extract quantifiable data from your sample while exposing it to the minimum of phototoxicity.

Gain the confidence to push the limits of your experiments with cutting edge sensor technology. Whether you need to capture stunning high-resolution images, carry out extreme low-light tracking of subcellular organelles or image high-speed cellular processes, the K8 can handle a wide range of challenging applications.

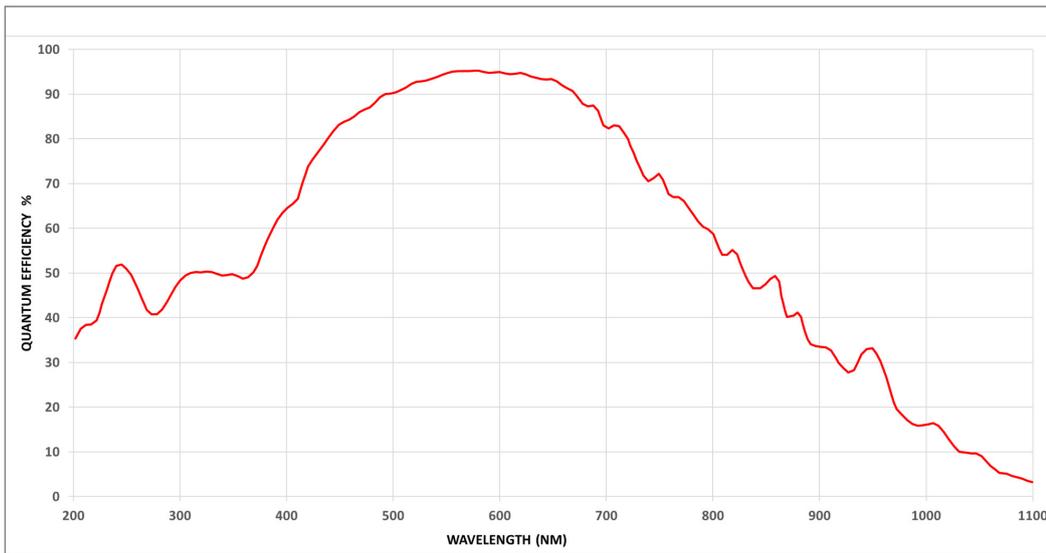
- > Capture more data from your sample
- > Razor-sharp THUNDER images even in extreme low light conditions
- > Take advantage of AI-enhanced clarity and accuracy



THUNDER-enhanced image of COS cells stained with DAPI (blue), microtubules (green), Mitochondria (red) and E-Cadherins (Grey).

# SPECIFICATIONS

Sensor type	Scientific CMOS	Dynamic range	25000:1
Sensor size (diagonal)	18.8 mm	Bit depth	16-bit, 12-bit, 11-bit, 8-bit
Sensor format	2048 x 2048 (4.2 Megapixel)	Binning options	2x2
Pixel dimensions	6.5 $\mu\text{m}$ x 6.5 $\mu\text{m}$	Operating system	Windows with LAS X application
Shutter mode	Rolling shutter	Power consumption	60 W
Data interface	USB 3 Gen2	Operating temperature	5 °C- 40 °C
Mechanical interface	C-mount	Sensor cooling	-5 °C at 25 °C ambient
Exposure range	1 ms -10 s	Peak quantum efficiency	95%
Frames per second	95 fps (in 11 bit mode)	Dark current	1.5 e-/pixel/second
Triggering	Yes, MMCX	Read noise	12-bit 1.0 e- (median) 1.1 e- (RMS) 16-bit 1.6 e- (median) 1.8 e- (RMS)
Full well capacity	45000 e-		



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<https://www.leica-microsystems.com/products/microscope-cameras/p/k8/>