

Preliminary Specifications*

Specifications	Camera Performance
Sensor	Teledyne Photometrics Kinetix Sensor
Active Array Size	3200 x 3200 (10.24 Megapixel)
Pixel Area	6.5µm x 6.5µm (42.25µm²)
Sensor Area	20.8mm x 20.8mm 29.4mm diagonal
Peak QE%	>95%
Readout Mode	Rolling Shutter Effective Global Shutter Programmable Scan Mode
Binning	2x2 (on FPGA)
Linearity	>99%
Cooling Options	Air Cooled Liquid Cooled

Camera Modes			
Specifications	Dynamic Range	Speed	Sensitivity (CMS)
Bit-Depth	16-bit	8-bit	12-bit
Frame Rate (Full Frame)	83 fps	400 fps	90 fps
Read Noise	1.8e ⁻	2.0e ⁻	>1.2e ⁻
Cooling	-10° C (air)	5° C (air)	-10° C (air)

*Specifications are subject to change.

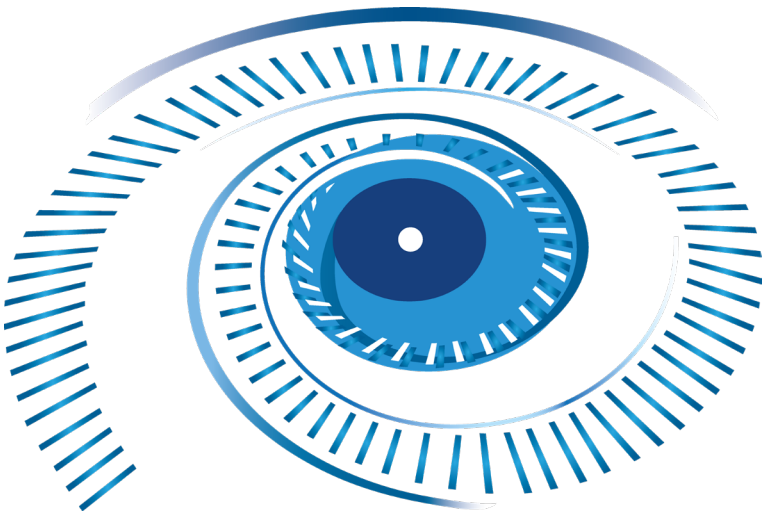
Book Your Demonstration Now

The Kinetix will be available for demonstration from February 2020

Visit the our website for more information and to register your interest:

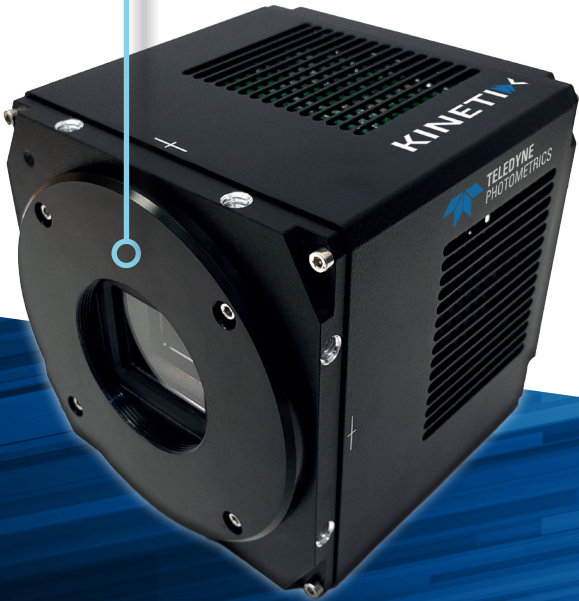
www.photometrics.com

To enquire about demonstration availability or to request more information:
photometrics.info@teledyne.com



KINETIX
High Speed, Back-Illuminated sCMOS

10 Megapixel Back-Illuminated sCMOS



- ▶ 400 Frames Per Second
- ▶ 29mm Field Of View
- ▶ 6.5µm x 6.5µm Pixels
- ▶ 1.2e⁻ Read Noise (CMS)
- ▶ >95% peak QE

KINETIX

High Speed, Back-Illuminated sCMOS

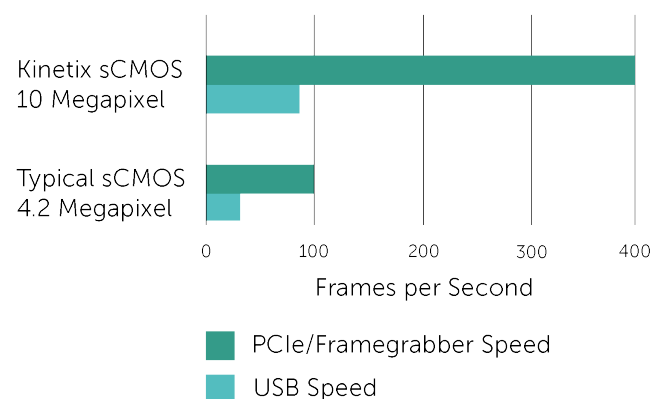
The back-illuminated Kinetix sCMOS camera delivers the fastest speed and the largest field of view with the most balanced pixel size and near perfect 95% quantum efficiency.



Kinetix Features

- ▶ 400 Frames Per Second
- ▶ 29mm Field Of View
- ▶ 6.5µm x 6.5µm Pixels
- ▶ 1.2e⁻ Read Noise (CMS)
- ▶ >95% peak QE

Extreme Speed



Don't Miss Anything

Taking advantage of an 8-bit readout mode, the Kinetix sCMOS delivers a tremendous 400 frames per second (fps), full frame with a 29.4mm diagonal field of view.

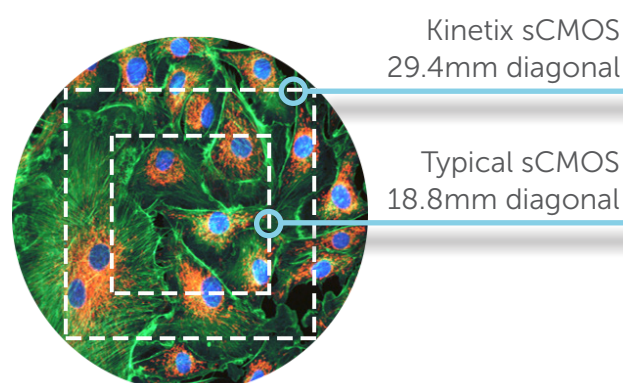
The optimized line time allows the speed to significantly outperform conventional sCMOS devices, delivering over 4000 megapixels/second - an almost 10-fold improvement.

Large Field of View

Capture More

The 29.4mm diagonal field of view of the Kinetix is designed to increase throughput, maximize the amount of data captured in a single frame and take full advantage of new, larger field of view microscopes.

At 29.4mm diagonal, the Kinetix sensor has a 2.4x larger imaging area than conventional sCMOS cameras allowing the user to significantly speed up data acquisition.



Ultimate Sensitivity

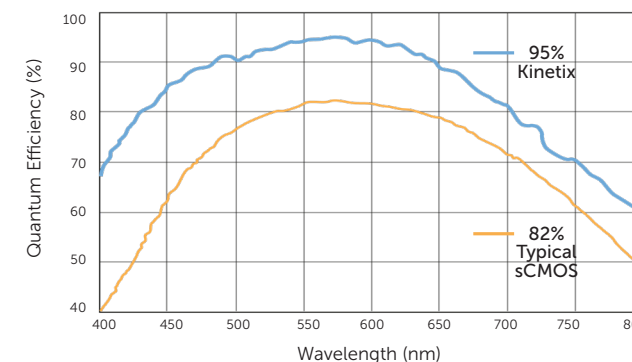


Image the Dimmest Samples

The Kinetix back-illuminated sCMOS camera achieves a near-perfect 95% quantum efficiency.

By bringing the light in from the back of the sensor, photons land directly onto the light receiving surface, maximizing light collecting capability.

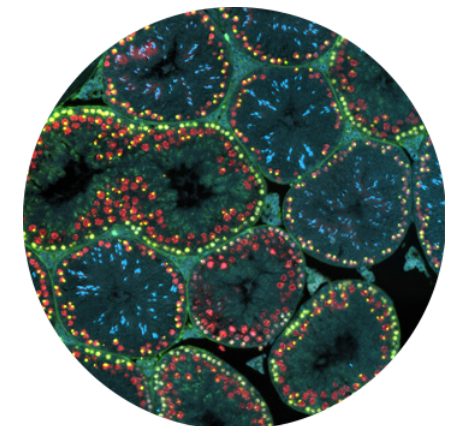
The Kinetix combines 95% quantum efficiency with a low 1.2e⁻ read noise to deliver the most sensitive sCMOS camera at over 400 frames per second.

High Resolution

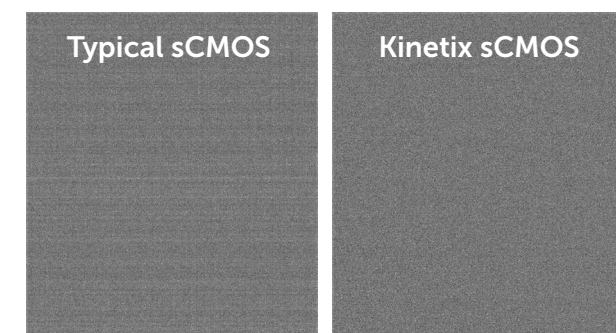
See Greater Detail

The Kinetix features 6.5µm x 6.5µm pixels, the accepted standard for most live cell applications using 40x and 60x magnification.

This pixel size provides highly detailed images across the entire imaging plane and is most suitable for the broadest range of microscope objectives.



Superior Background Quality



Acquire Pattern-Free Images

The Kinetix features Pattern Noise Reduction Technology and Correlated Noise Reduction Technology to ensure that it delivers clean, pattern free images with minimal pixel defects, delivering improved image quality in low light conditions.