Addressing the Challenges of High Speed Imaging with the Kinetix sCMOS

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Historically, achieving faster frame rates on scientific cameras has meant creating a smaller region of interest and sacrificing imaging area or making other compromises such as on noise performance. High speed imaging also requires low exposure times which results in fewer photons captured per pixel which may have detrimental effects on image quality.

The Kinetix sCMOS addresses these challenges with a 500 frames per second readout mode with a huge 29.4 mm diagonal field of view. Combining this with 95% peak quantum efficiency and a low 1.0 e- read noise mode, the Kinetix is able to deliver fast imaging for the highest speed applications without sacrificing field of view or signal detection capability.