

ORCA-Fusion BT sCMOS camera: See What You've Been Missing...

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The ORCA-Fusion BT is the scientific CMOS (sCMOS) camera that you've all been waiting for from Hamamatsu Photonics. The newly released ORCA-Fusion BT is the only sCMOS camera that realises both the ultra-low readout noise of 0.7 electrons rms and highest Quantum Efficiency (QE) together for the highest signal to noise ratio. This camera is the peak of sCMOS performance with a back-thinned sensor that boosts QE to a peak of 95% to enhance photon collection. Hamamatsu is very proud to introduce the ORCA-Fusion BT as their new flagship camera through this Frontiers in Bioimaging Techno Bite.

The ORCA-Fusion BT is a camera that is custom designed with low light level research in mind. This sCMOS camera produces high quality data in imaging applications with the fewest number of photons. The ORCA-Fusion BT's specifications are without compromise: ultra-low readout noise, CCD-like uniformity, fast frame rates and back-thinned enabled high 95% QE. The custom sensor, with accompanying specifications, was created to make the most demanding applications easy.

No single camera can deliver perfect performance for every application; But the ORCA-Fusion BT comes close. The beauty of the ORCA-Fusion BT is what this combination of exceptional photon detection and collection can do for you. See the dimmest whisper of signal, acquire visually stunning, high Signal to Noise (SN) images from the fewest photons, capture previously unresolved temporal events and perform computational methods reliably. When scientific insight hinges on infinitesimal differences in intensity, the ORCA-Fusion BT will register signal with confidence.

The ORCA-Fusion BT is the camera that makes the difficult experiments easy and previously impossible experiments possible. A wide range of applications could benefit from the ORCA-Fusion BT, from voltage imaging to super resolution to quantum imaging, however we demonstrate the benefits of the ORCA-Fusion BT during this session using an exclusive, visually stunning video of live cell single molecule TIRF. You will be able to see for yourselves the benefits of an sCMOS camera with ultra-low readout noise (0.7 electrons rms) now united with 95% QE.

Join Hamamatsu's Techno Bite on the ORCA-Fusion BT sCMOS camera to see what you've been missing...