DECTRIS Ltd.

At DECTRIS, we develop and manufacture cutting-edge high-performance hybridpixel electron detectors for Materials Science and Life Science applications. Our electron detectors use single-electron detection based on hybrid-pixel technology where the best readout chip is matched with the most suitable sensor material to provide the optimized sensitivity (DQE). Dedicated in-pixel electronics allow for single-electron counting even at very high count-rates, up to 10 million electrons/pixel/second. The sensor material can be adapted to the energy range of any EM application, SEM and TEM included.

- QUADRO designed to deliver outstanding performances to Materials Science Transmission Electron Microscopy (TEM) without any compromise on accuracy, speed, or sensitivity. It delivers 32-bit high dynamic range, up to 18,000 frames per second readout, and does not require a beam stopper.
- ELA a hybrid-pixel electron detector dedicated to Electron Energy Loss Spectroscopy (EELS) that is capable of recording the intense zero-loss peak (ZLP) while counting single electrons in all regions of the spectrum. The detector has an ideal DQE, it provides a very high dynamic range and count-rate for over 1,000 channels, and it runs at 4,500 full frames per second in continuous acquisition mode.
- SINGLA with its roughly 1,000 x 1,000 pixels, it is suitable for Cryo-Electron Microscopy (CryoEM) and Micro-Electron Diffraction (MicroED) applications. Single-particle analysis and cryo-electron tomography also benefit greatly from the detector's speed. In addition, the SINGLA's fast readout speed (exceeding 2,000 frames per second), combined with its superior dynamic range, makes it the ideal detector for small-molecule and 3D microcrystallography.

DECTRIS provides reliable, easy-to-integrate detectors that enable customers to focus on their unique competitive advantages. With our comprehensive technological knowledge and industrial-scale manufacturing, customers enjoy consistent product quality and on-time delivery. Our noise-free, spectral, and fast detectors provide better data that keeps customers ahead of the competition.

DECTRIS is working together with several EM manufacturers to develop the next generation of electron-counting detectors, providing our OEM partners with premier performance, plus the confidence of working with a stable and trusted technology supplier.







How to find us

Address here: DECTRIS Ltd. | Taefernweg 1 | 5405 Baden-Daettwil | Switzerland Tel: +41 56 500 21 00 Fax: +41 56 500 21 01 Email: info@dectris.com URL Link here: www.dectris.com

DECTRUS USA Inc. | 325 Chestnut Street, Suite 800 | Philadelphia, PA 19106 | USA Tel: +1 215 384 34 79 Email: info@dectris.com URL Link here: www.dectris.com