DECTRIS

POLLUX

Versatility meets performance

NEW

POLLUX
PANORAMA HR

**REDEFINING
1D RESOLUTION**

POLLUX®

Versatility Meets Performance in X-Ray Detection

DECTRIS POLLUX® is the lab detector that redefines what you can expect from compact, energy-discriminating X-ray detection. Whether you're integrating it into a next-generation instrument or want to run fast measurements of high-quality data in the lab, POLLUX delivers exceptional results — consistently and effortlessly.

Designed to deliver the **optimal balance between energy resolution, count rate, and active area**, POLLUX sets a new benchmark for real-world performance. With dual energy discrimination and excellent resolution, POLLUX effectively suppresses fluorescence and high-energy background, providing clearer signals and better peak-to-background ratios. Its large active area captures more of the beam and covers a wider angular range, enabling faster measurements and improved data quality. Thanks to its superior count rate capabilities, POLLUX enables accurate measurement of high intensities and supports absorber-free reflectometry experiments.

Engineered for versatility, POLLUX is ready for everything from diffraction to spectroscopy. With its compact form factor and effortless integration, it's an easy fit for any instrument. And thanks to robust electronics and passive cooling, it offers best possible reliability.

Key Advantages

Excellent energy resolution and dual energy discrimination for effective background suppression.

Superior count rates for unparalleled dynamic range.

Pixel detector with 2D, 1D and 0D readout modes.

Up to 400 Hz frame rate for fast scanning.

Large active areas for wide angular coverage.

Applications

- Powder X-ray diffraction
- Residual stress
- X-ray reflectometry
- Wavelength-dispersive X-ray spectroscopy
- Small- and wide-angle X-ray scattering

Technical Specifications

	POLLUX	POLLUX PANORAMA	POLLUX PANORAMA HR
Active area (W x H) [mm²]	19.2 × 14.4	57.9 × 14.4	
Pixel array (W x H)	256 × 192	772 × 192	1544 × 96
Pixel size (W x H) [µm²]	75 × 75		37.5 × 150
Count rate per pixel (max., @8 keV) [ph/s]	1.0 × 10^6		
Energy resolution (FWHM @8 keV) [eV]	< 600		
Energy range [keV]	4.5 - 12		
Threshold range [keV]	2.7 - 12		
Number of energy thresholds	2		
Readout modes	2D, 1D, 0D, each with ROI		
Frame rate (max. for 2D/1D/0D) [Hz]	360/360/360		
Readout time	Zero dead time continuous readout		
Sensor material	Silicon		
Sensor thickness [µm]	320		
Point-spread function (FWHM) [pixels]	1		
Vacuum compatibility	Optional		
Cooling	Passive air		
Dimensions (W x H x D) [mm³]	29 × 62 × 37	68 × 62 × 37	
Weight [kg]	0.13	0.28	

NEW
REDEFINING 1D RESOLUTION

* Specifications are subject to change without prior notice.

DECTRIS AG

Taefernweg 1
5405 Baden-Daettwil
Switzerland
+41 56 500 21 00

sales@dectris.com
support@dectris.com

www.dectris.com

DECTRIS USA Inc.

1500 Walnut Street, Suite 1630
Philadelphia, PA 19102
USA
+1 215 384 3479

DECTRIS Japan K.K.

Nakagawa building 801
3-37 Higashi-Nobusue
Himeji-shi
Hyogo 670-0965
Japan
+81 (0)79 280 9585

Registered Trademarks

"DECTRIS": AU, AUS, CH, CN, DE, FR, IT, JP, KR, USA, UK
"DECTRIS INSTANT RETRIGGER": AUS, CH, CN, EU, JP, KR, UK, USA
"DECTRIS EIGER": AUS, CH, CN, EU, JP, KR, UK, USA
"DECTRIS PILATUS": AUS, CH, CN, EU, JP, KR, USA
"DECTRIS POLLUX": CH, AUS, EU, JP, KR, USA, CN & UK

May 2026

Read more