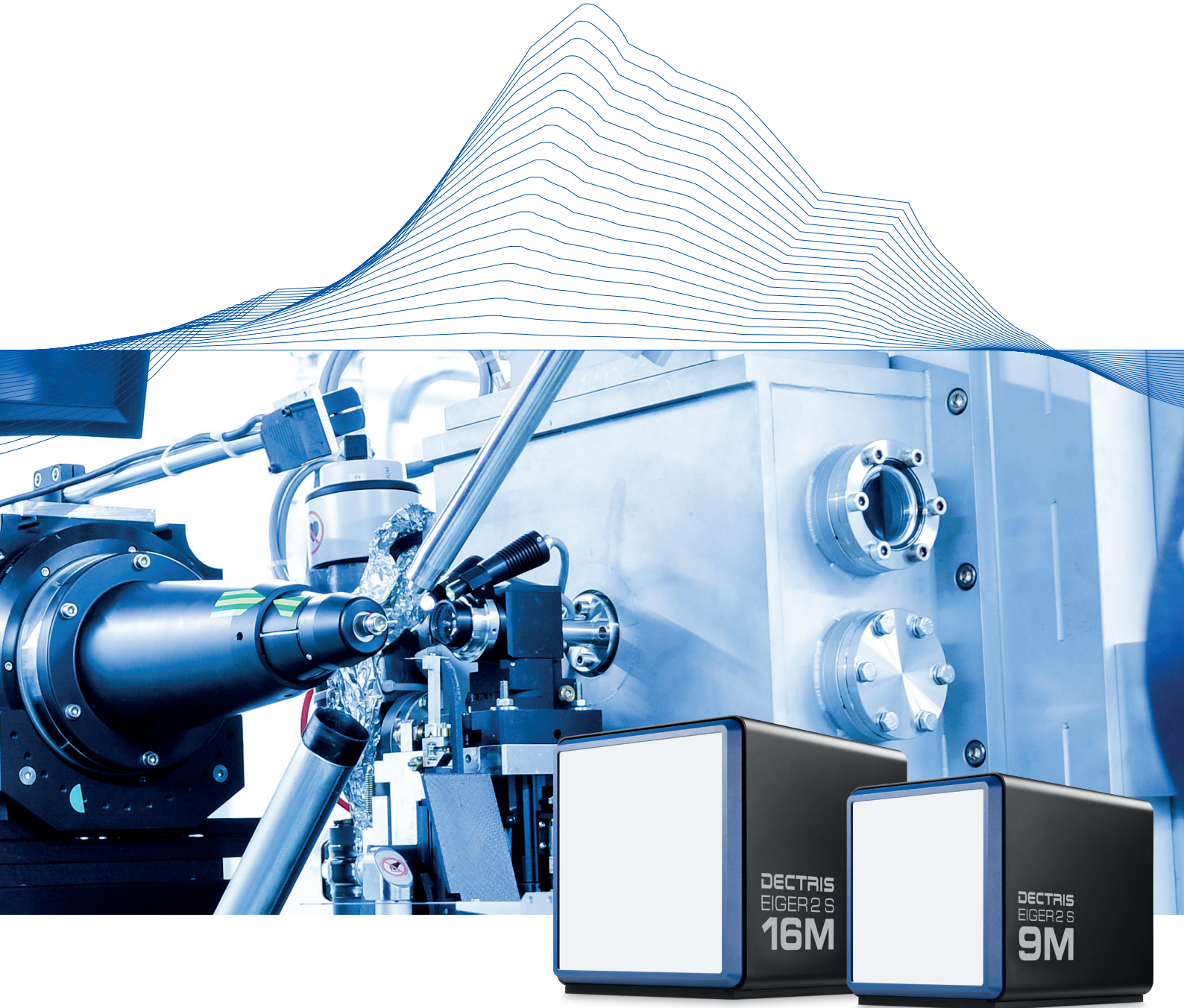
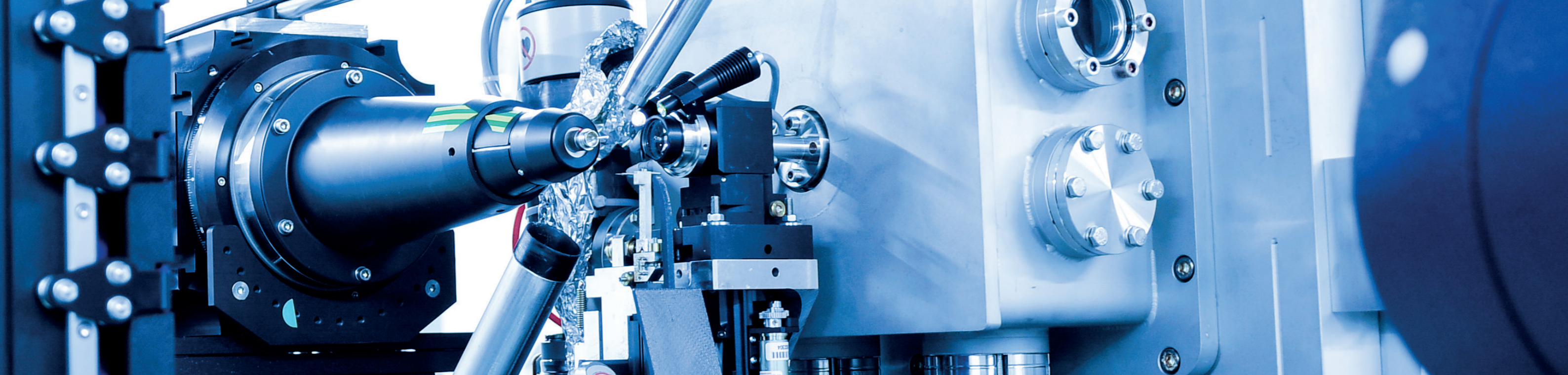


DECTRIS
detecting the future



EIGER2 S

When size matters most



Proven technology for excellent data

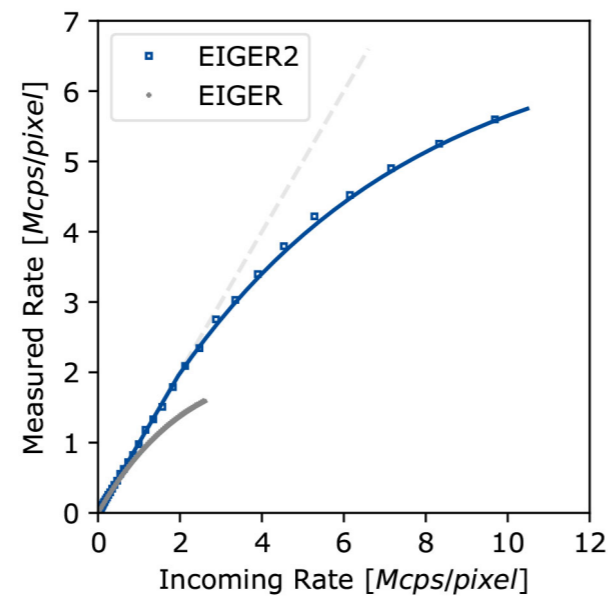
Some experiments need ultimate speed to be successful, others require a large active area. However, both will benefit from the latest developments in Hybrid Photon Counting (HPC) technology. When size matters most, EIGER2 S is a more affordable alternative to EIGER2 X. This detector series is the perfect choice if your research requires large-area, high-resolution detectors with an unbeatable price per pixel.

Key benefits

- Wide angular coverage thanks to large active area
- High count rate with no read-out noise or dark current thanks to HPC technology
- Easy use thanks to room temperature operation and only one control unit
- Maximized operation time thanks to devoted DECTRIS support

Applications

- Macromolecular crystallography
- Single crystal diffraction
- Small- and wide-angle X-ray scattering
- Powder diffraction
- Surface diffraction
- Ptychography



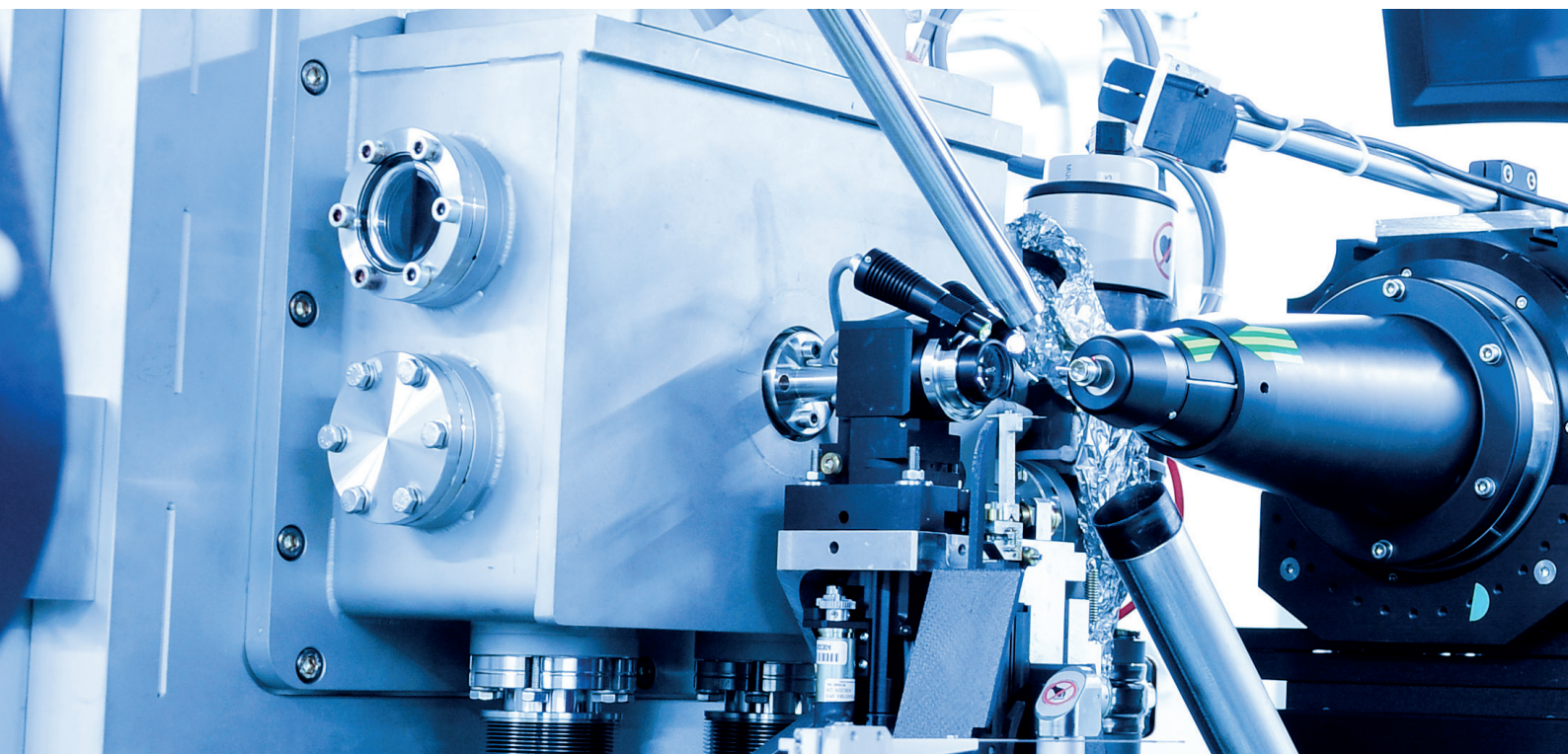
Count rate comparison between EIGER and EIGER2 systems at 12 keV photon energy

Technical specifications

EIGER2 S	1M	4M	9M	16M
Sensitive area, width x height [mm²]	77.1 x 79.7	155.1 x 162.2	233.1 x 244.7	311.1 x 327.2
Pixel size [μm²]	75 x 75	75 x 75	75 x 75	75 x 75
Frame rate [Hz]	1000	100	40	25
Total number of pixels	1028 x 1062 = 1,091,736	2068 x 2162 = 4,471,016	3108 x 3262 = 10,138,296	4148 x 4362 = 18,093,576
Energy-discriminating thresholds	2	2	2	2
Count rate capability [counts/s/pixel]	10 ⁷	10 ⁷	10 ⁷	10 ⁷
Point-spread function [pixel]	1 (FWHM)	1 (FWHM)	1 (FWHM)	1 (FWHM)
Silicon sensor thickness [μm]	450	450	450	450
Optional vacuum compatibility	yes	yes	no	no
Data format	HDF5/NeXus	HDF5/NeXus	HDF5/NeXus	HDF5/NeXus
Customer network interfaces	2 x 1 Gbe Base-T 2 x 10 Gbe SFP+ 2 x 100 Gbe QSFP28	2 x 1 Gbe Base-T 2 x 10 Gbe SFP+ 2 x 100 Gbe QSFP28	2 x 1 Gbe Base-T 2 x 10 Gbe SFP+ 2 x 100 Gbe QSFP28	2 x 1 Gbe Base-T 2 x 10 Gbe SFP+ 2 x 100 Gbe QSFP28
Dimensions (WHD) [mm³]	114 x 133 x 242	235 x 237 x 372	340 x 370 x 500	400 x 430 x 500
Weight [kg]	4.7	15.7	42	53

All specifications are subject to change without notice.





DECTRIS Ltd.
Täferweg 1
5405 Baden-Dättwil
Switzerland

Phone +41 56 500 21 00
Fax +41 56 500 21 01
E-mail sales@dectris.com
www.dectris.com

Registered trademarks: „DECTRIS“: EU, JP, CN, KR (IR0911969), USA (5,253,168)
„detecting the future“: EU, CN, KR, JP, AUS (1191333), USA (4,607,800)
„DECTRIS Instant Retrigger“: EU, CN, KR, JP, AUS (1224728), USA (4,797,363)
„DECTRIS EIGER“: EU, CH, AUS (IR1350410), USA (5,415,155)
© 2019 DECTRIS Ltd., all rights reserved • Subject to technical modifications;
Rev.3 • Printed 12/2019