



## maxipix pixel detector

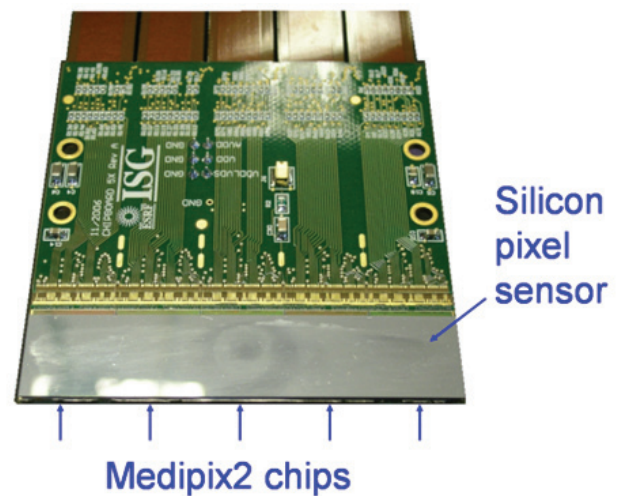
MAXIPIX [1] is a fast-readout, high spatial resolution, photon-counting pixel detector system designed by the ESRF and based on the Medipix2/Timepix readout chips [2,3] developed by CERN and the Medipix2 collaboration.

The detection geometry can be chosen among three different dimensions, making MAXIPIX ideally suited for many synchrotron applications, such as inelastic scattering, micro-SAXS, surface diffraction, coherent diffraction and XPCS.

- ◆ Noise-free X-ray images and high dynamic range
- ◆ Smallest pixel size and highest frame rate among currently available pixel detectors
- ◆ High spatial resolution



MAXIPIX detector (5x1 version)



5x1 module

### Characteristics

	1 x 1	2 x 2	5 x 1
Sensor matrix size (pixels <sup>2</sup> )	256 x 256	512 x 512	1280 x 256
Detection area (mm <sup>2</sup> )	14 x 14	28 x 28	71 x 14
Frame rate (Hz)	1400	350	280
Readout dead time (ms)	0.29	0.29	0.29
Maximum count rate (cps/pixel)	2.10 <sup>5</sup>	2.10 <sup>5</sup>	2.10 <sup>5</sup>
Energy range (keV)	4-25 (500 μm silicon sensor)		