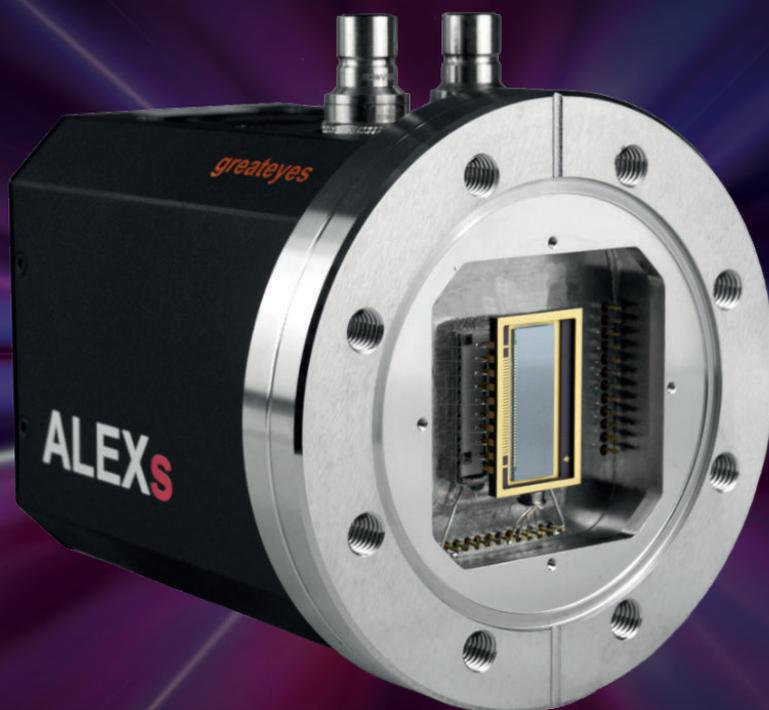


ALEXi / ALEXs

The perfect detector series for high-energy at synchrotrons, for high harmonic generation systems, or laser plasma sources



Pembroke Instruments, LLC
San Francisco, CA 94127 USA
<https://pembrokeinstruments.com>
sales@pembrokeinstruments.com
Tel. 650-550-8618

VUV

EUV

SXR

HXR

KEY SPECIFICATIONS

- High Quantum Efficiency
- Ultra Deep Cooling to -100°C
- 18-bit Dynamic Range
- Lowest Outgassing
- 50 kHz - 5 MHz Readout
- Multi-port Readout
- Binning, Crop, ROI
- GigE & USB 3.0 Interface
- Compact Design

TYPICAL APPLICATIONS

- Soft X-ray Spectroscopy
- Plasma Emission Spectroscopy
- High Harmonic Generation Spectroscopy
- NEXAFS Spectroscopy
- Resonant Inelastic X-ray Scattering

ALEX



Berlin is unique for its character, and so is ALEX

The Berlin TV Tower (the tallest building in Germany) and the ALEX square below it, are symbols of Berlin and beloved by Berliners.



FEATURES & BENEFITS

Ultra deep TE cooling down to -100°C

lowest dark current for better detection limit

GigE & USB 3.0 data interface

local or remote network operation – your choice!

Fast readout speeds up to 5 MHz

fast frame rates paired with low-noise electronics

High QE up to 98%

very sensitive sensors for low light applications

User selectable gain

balance your detector for best SNR and dynamic range

Flexible software options

camera software and SDKs available

ALEX SERIES

Straight out of Berlin comes **ALEX**, greateyes' new platform for imaging and spectroscopy applications in the VUV, EUV, soft and hard X-Ray range.

ALEX integrates cutting-edge low-noise electronics and ultra-deep cooling technology while keeping a compact camera design. Multiple readout speeds can be selected supporting pixel rates from 50 kHz up to 5 MHz.

True 18-bit AD conversion allows to exploit the full dynamic range of the CCD sensor for highest performance and SNR. **ALEX** is ideally suited for detection of very weak signal intensities where a low-noise floor is paramount.

ALEX offers unprecedented possibilities for your measurements of tomorrow.



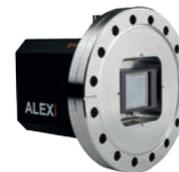
ALEXs 1k128 & 1k256



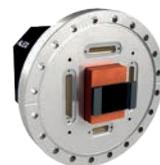
ALEXs 2k512



ALEXi 1k1k



ALEXi 2k2k



ALEXi 2k2k plus



ALEXi 4k4k