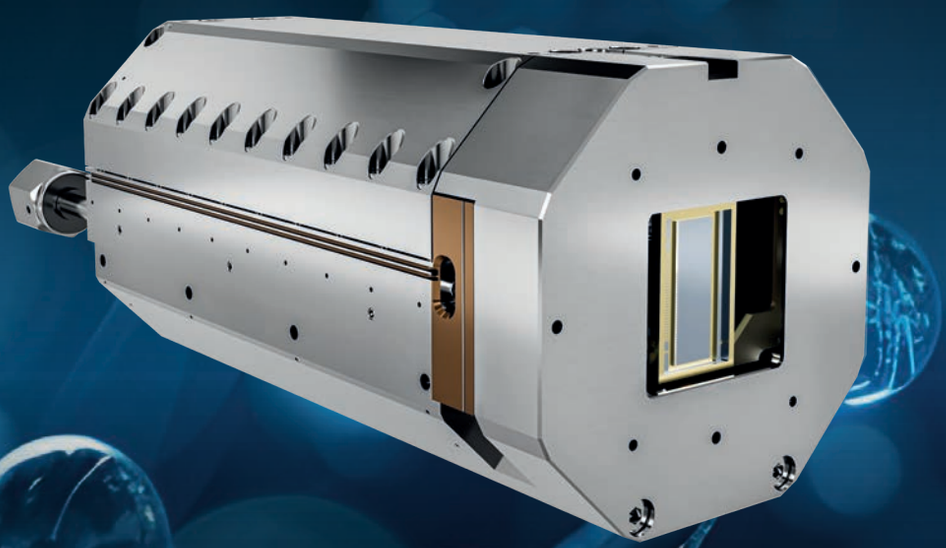
greateyes
EXPAND YOUR VISION

CAMERA SERIES FOR
IMAGING & SPECTROSCOPY

LOTTEi / LOTTEs

Innovative in-vacuum camera series with lowest outgassing, deepest cooling, and ultra low noise performance



VUV
EUV
SXR
HXR

KEY SPECIFICATIONS

Ultra-high Vacuum Compatible Encapsulated Design

High Quantum Efficiency

Ultra Deep Cooling to -100°C

18-bit Dynamic Range

Lowest Outgassing

50 kHz - 5 MHz Readout

Multi-port Readout

GigE Interface

TYPICAL APPLICATIONS

Soft X-ray Spectroscopy

Plasma Emission Spectroscopy

High Harmonic Generation Spectroscopy

NEXAFS Spectroscopy

Resonant Inelastic X-ray Scattering

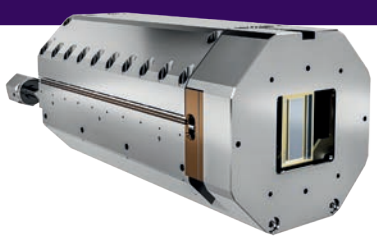
www.greateyes.de

PRECISOMETER
Official representative of Greateyes

info@precisometer.com
precisometer.com/greateyes

LOTTE





Wearing the crown for lowest outgassing rate

Queen Sophia Charlotte - nicknamed ‘LOTTE’ - laid the foundation stone of Berlin’s most famous palace ‘Schloss Charlottenburg’

FEATURES & BENEFITS

Ultra deep TE cooling down to -100°C
lowest dark current for better detection limit

GigE data interface
local or remote network operation – your choice!

Fast readout speeds up to 5 MHz
fast frame rates paired with low-noise electronics

UHV Compatibility
encapsulated design delivers the lowest outgassing rate

High QE up to 98%
very sensitive sensors for low light applications

Flexible software options
camera software and SDKs available

LOTTE SERIES

LOTTE in-vacuum CCD camera can be submerged, operated and positioned freely inside a vacuum chamber.

Utilising scientific-grade back-illuminated CCD sensors for the detection of EUV, VUV, and X-ray signals, **LOTTE** is equipped with a novel and advanced cooling concept enabling detector temperatures as low as -100°C. It is furthermore driven by the most powerful and versatile true 18-bit electronic platform available for in-vacuum use. This guarantees ultra low noise performance.

One key feature that differentiates **LOTTE** from its nearest rivals is an innovative encapsulated stainless-steel housing, assuring extremely low outgassing at all times. The special design and unprecedented performance make the **LOTTE** a unique companion for demanding low-light scientific research applications.

All LOTTE models are available in two versions

LOTTEs 1k128

LOTTEs 1k256

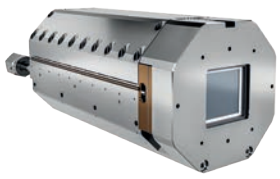
LOTTEs 2k512

LOTTEi 1k1k

LOTTEi 2k2k

LOTTEi 2k2k plus

LOTTEi 4k4k



‘rc’ version



‘sc’ version

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DS-LOTTE-series / Rev05 / Sep2026

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Explore products & discuss your experiment