

**BRUKER NANO ANALYTICS** 

## XFlash® 7 – The New EDS Detector Series

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## XFlash® 7 – The right angle for better analysis

Fast. Precise. Reliable.



XFlash® 7 - the detector for SEM and FIB-SEM

XFlash® 7T - the detector for TEM and STEM



XFlash® 7 for SEM – Key facts

Up to 1,000,000 cps

Real analytical throughput

Achieve unmatched

analysis speed

> 2,200 Element lines

Quantify complex data using the most comprehensive atomic database incl. K, L, M and N lines

> 1.1 sr

Largest solid angle for X-ray collection

Maximize sample throughput with optimum geometry for most efficient collection of the generated X-rays



### XFlash® 7 - Benefits

### Make your element analysis more efficient

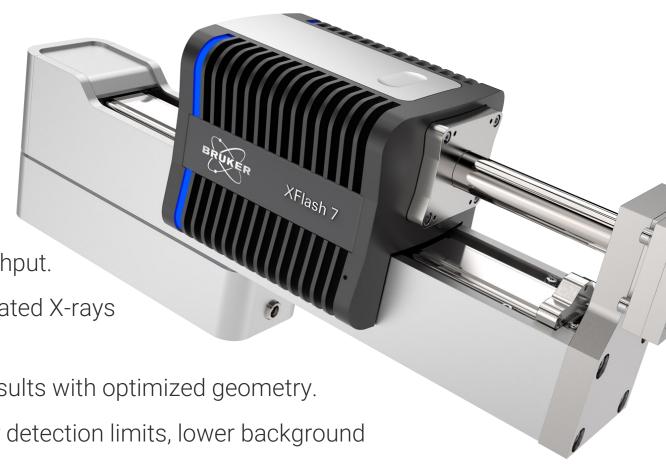
 Individually optimized EDS systems to provide unmatched speed and precision.

Shorten measurement time with maximized throughput.

 The most efficient geometry for collection of generated X-rays to analyze challenging samples.

Benefit from accurate and reliable quantification results with optimized geometry.

 Detect smaller quantities of matter thanks to better detection limits, lower background and less absorption.





### XFlash® 7 - Benefits

#### Get the most out of your system and uptime



- One for all seamless integration of EDS, WDS, EBSD, and micro-XRF in the comprehensive ESPRIT analysis platform. Available for any SEM, FIB-SEM and EPMA allowing users to switch easily between techniques.
- Maximize system uptime and ensure data integrity with on-demand health check. Tracking the detector parameters and allowing predictive maintenance to expand detector lifetime.
- All components can be exchanged on-site
- Applicable to many market segments, e.g., Material or Life Science research and Semiconductor industry.



## XFlash® 7 – Feature highlights

- Bruker's latest generation of QUANTAX EDS features the XFlash® 7 detector family providing the largest solid angle for X-ray collection and highest throughput
- The XFlash® 7 continues to set standards in performance and functionality for Scanning Electron Microscope (SEM), Focused Ion Beam (FIB) and Electron Probe Micro Analyzer (EPMA)
- The XFlash® 7 detectors offer optimized solutions for EDS analysis of electron transparent specimens in TEM and SEM
- The unique annular XFlash® FlatQUAD answers your questions on challenging samples, e.g., low kV, low beam current, and surface topography

- Slim-line technology, large collection angle design, latest generation pulse processing
- Highest spectral performance obtained with best energy resolution
- Increased results accuracy by sophisticated quantification algorithms and a unique combination of standardless and standard-based methods
- Time resolved data acquisition for in-situ experiments
- Maximized system uptime through preventive maintenance



## **ESPRIT** software suite – New packages

#### ESPRIT Core

The base package including ESPRIT HyperMap

#### ESPRIT Quant Plus

- Includes all quantification options for SEM and TEM, standardless and standard-based, QLine, QMap.
- Automated and customized quantification methods

#### ESPRIT Image Plus

Includes all image processing tools, Drift correction,
Stage control, StageMap, ESPRIT LiveMap, etc.

#### ESPRIT Automation Plus

Jobs, Particle and Time Resolved Measurements

#### **ESPRIT** Core

Comprehensive EDS software suite for routine and demanding analysis

## ESPRIT Quant Plus

Pioneering quantification methods for spectral analysis. Full user control when needed

#### ESPRIT Image Plus

Optimize your information output using advanced image algorithms

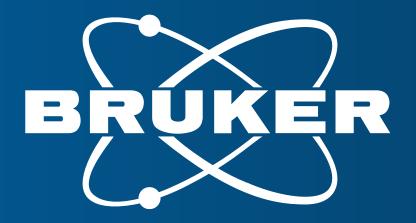
## ESPRIT Automation Plus

Enhance your productivity with automated measurements



# Thank you!

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Innovation with Integrity