## **AZtecLiveLite with Xplore for SEM**

### Real-Time **Chemical Analysis**

AZtecLiveLite with Xplore is a system solution that takes the EDS technique from the static to the dynamic with real-time chemical analysis.

AZtecLiveLite includes all the tools required to perform:

- Qualitative and quantitative analysis
- Image capture and image centric analysis (both static and dynamic)
- · X-ray spectral mapping and line scanning
- AutoID and standardless quantitative analyses achieved automatically to new levels of accuracy

AZtecLiveLite Software			
lmage	✓ (Res up to 8K)		
Spectrum Acquisition	✓		
X-Ray Mapping	✓ (Res up to 4K)		
X-Ray LineScanning	✓ (up to 8K points)		
Live Chemical Imaging	✓		
AZtecLiveLite can be easily upgraded to meet expanding application requirements (Users can choose from a host of software options)			
TruMap	Optional		
Drift Correction	Optional		
AZtecFeature	Optional		

Hardware - Xplore with X1 electronics			
Detector	Xplore		
Sensor Sizes	15mm² and 30mm²		
Detection Range	B(5) to Cf(98)		
Resolution	Mn K <129eV⊚100,000cps		
Max. input count rate	>1,000,000 cps		
Quantitative count rate	>100,000 cps		
Controller	X1 (1 Detector, 2 images)		



#### **AZtecLiveLite Software**

AZtecLiveLite EDS Software is designed for users with more advanced EDS requirements and is equipped with several navigators, which are designed to help take you through your analysis tasks step by step, enabling all users to achieve the same high-quality results every time.









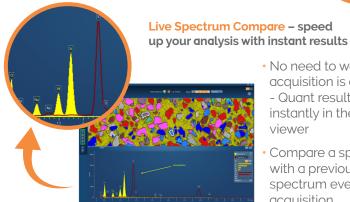
#### Live | Mapping | Point&ID | LineScanning



#### Live Chemical Analysis - A completely new way of investigating your sample

Enables the quick and comprehensive investigation of a sample with real-time chemical feedback via a Live Electron Image, Live X-ray Maps and a Live Spectrum, even while the SEM stage is moving.



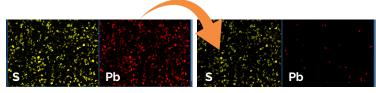


- · No need to wait until acquisition is completed
- Quant results shown instantly in the MiniQuant
- Compare a spectrum with a previously acquired spectrum even during acquisition

#### **Optional Software:**

TruMap - Overlap and background correction helps you see the true distribution of elements in your sample

With normal mapping S and Pb maps look identical, but with TruMap technology the real S and Pb distributions are revealed



Standard X-Ray maps

Overlap corrected maps

AZtecFeature - Automated particle analysis platform for the rapid characterisation of 1000s of particles, features and/or inclusions per hour.

- Find rare "killer" particles
- Determine proportions of different particle types

# Software Comparison Table

DESCRIPTION	AZtecOne	AZtecLiveOne	AZtecLiveLite
Analyser Navigator/Step (Spectrum Acquisition)	✓	✓	✓
Point&ID Navigator/Step (Spectrum Acquisition)	✓	✓	✓
Mapping Navigator/Step (Map Acquisition)	✓	✓	✓
LineScan Navigator/Step (LineScan Acquisition)	✓	✓	✓
LiveSpectrum for AZtecLiveOne with Live Spectrum Viewer (Live chemical analysis)	×	✓	×
LiveMapping for AZtecLiveOne (Live Chemical Imaging)	×	0	×
AZtecOne AutoLock (Drift correction for AZtecLiveOne software)	×	0	×
AZtecLiveStep (Live Chemical Imaging)	×	×	✓
AZtecLiveTrace (Records locations visited during 'Live' analysis)	×	×	
Image Registration (use imported image to navigate in microscope) – also works on SEM images	×	×	
AZtec Standardisation Manager (Input users standards)	×	×	O
Report Template Editor (Create your own report templates)	×	×	PACK
Custom Mode (Configurable user interface)	×	×	
AZtec AutoLayer (Automatically combine electron image and X-ray maps in a single image)	×	×	
AZtec TruMap (Overlap and background corrected mapping)	0	0	0
AZtec AutoLock (Drift correction for AZtecLive Software)	×	×	0
AZtec AutoPhaseMap (Automatic phase analysis)	×	×	0
AZtec QuantMap (Quantitative Mapping and Linescanning)	×	×	0
AZtec Large Area Mapping	×	×	0
AZtec MapQueue (Automated point map acquisitions)	×	×	0
AZtecFeature Analysis (Automated Particle Analysis software)	×	×	0
AZtecSteel (automated analysis and classification of non-metallic inclusions in steel - Requires MS Office and AZtecFeature)	×	×	0
AZtecGSR Package (Gun Shot Residue analysis – requires AZtecFeature)	×	×	0
AZtecClean (Measure the Technical cleanliness of components to industrial standards - requires AZtecFeature)	×	×	0
AZtecAM (Automated analysis of particles used in Additive Manufacturing – requires AZtecFeature)	×	×	0
AZtecMineral - automates the acquisition of EDS data and morphological information from geological materials. The accompanying post-processing application, GrainAlyser2, includes the option to classify against a database containing >4000 mineral compositions.	×	×	0
AZtec LayerProbe (Calculates thicknesses and compositions of multi-layer structures)	×	×	0
AZtecLiveOne for AZtecLive (Add AZtecLiveOne functionality to an AZtecLive installation)	×	×	0

The materials presented here are summary in nature, subject to change, and intended for general information only. Additional details are available. Oxford Instruments NanoAnalysis is certified to ISO9001, ISO14001 and OHSAS 18001. Ultim, AZtec, and LayerProbe are Registered Trademarks of Oxford Instruments plc, all other trademarks acknowledged.

© Oxford Instruments plc, 2019. All rights reserved. LITR511908-01

