



- Unique and innovative electronics built into the detectors delivers cleaner data for optimal results
- Intuitive and easy to use TEAM™ software
- Smart Features ensure consistent data collection, analysis and reporting regardless of the experience level of the operator
- Motorized slide automatically retracts to protect detector against excessive backscatter electrons
- Unique geometry inside the TEM column ensures optimal performance
- Market leading solid angles up to 1.1 steradian

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TEAM™ EDS Analysis System with the Octane Silicon Drift Detector (SDD) Series for the Transmission Electron Microscope (TEM) provides the ultimate analytical solution for TEM applications.

The Octane SDD Series for the TEM blends the latest SDD technology with EDAX's next generation high efficiency electronics to provide superior performance. The system electronics are built into the detector, eliminating the need for a separate electronics box, and minimizing the system footprint, while maximizing versatility and convenience. All communication is done via ethernet, providing speed, convenience and enhanced troubleshooting capabilities.



Spectra of SiO₂ collected with the Octane T Plus detector (red) compared to a SiLi Detector (blue) have been normalized to the highest energy part of the spectrum. The Octane T Plus detector significantly improves the low energy sensitivity. The Si K intensity is improved by 30% and the O K by 150%

EDAX was the first microanalysis company to introduce a windowless version of an SDD detector. The Octane SDD Series for TEM provides optimum light element performance with complete transmission of low energy X-rays. When compared to a Super Ultra Thin Window (SUTW) detector, the light element sensitivity is improved up to 500% and the count rate is increased by 30% for heavy elements. As a result, the mapping speed and light element detection in low concentrations are greatly enhanced.

TEAM™ EDS Analysis System has a modern interface that allows for a unique layout and maximizes the display for analysis results. TEAM™ Smart Features revolutionize EDS analysis to make the system more intuitive and easier to use. Regardless of the skill of the operator, consistent and accurate results are achieved effectively and efficiently every time. TEAM™ EDS automatically determines the elements in your sample, and monitors the count rate and magnification, as well as numerous other parameters used for optimum system performance.

TEM quantification algorithms for thin material are now available in TEAM™ EDS. The quantification model is based on the Cliff-Lorimer method for fast and accurate analysis. Users have the flexibility to work in conjunction with standards to determine their own Cliff-Lorimer factors and theoretical methods.

Specifications

- Resolution of 129 eV or better, measured at MnK, according to ISO 15632:2012
- Resolution stability of <1 eV up to 100 kcps
- Uniquely designed 30 mm², 60 mm² and 100 mm² SDD chips optimized for solid angle
- Peak to background >9000:1
- Input count rates up to 3,000 kcps and throughput >950 kcps
- 5 eV/Ch and 10 eV/Ch for flexible acquisition

Smart Features

- Spectrum Survey with EXpert ID
- Smart Quant with EXpert ID
- Multipoint Analysis
- Linescan Acquisition
- Smart Phase Mapping
- Smart Data Management
- EDS Quant Maps and Rebuild
- Smart Drift Correction
- Offline Software License

Smart Features

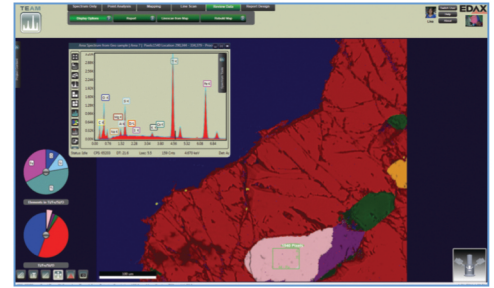
Smart Track

Smart Track is built into the Environment Panel to quickly and easily ensure the optimal working conditions upon setup.

Smart Phase Mapping

Smart Phase Map collection requires no setup and starts immediately upon request.

Neither mapping setup parameters nor prior peak identification need to be defined before collection. Simply find the area of interest and begin the collection. TEAM™ EDS will determine the best mapping resolution, the time required, and automatically identify all the elements present. Smart Mapping uses analytical intelligence to automatically decide how to collect the map based on any analysis conditions.



TEAM™ EDS is built with a modern interface that maximizes the display area for the results and allows quick access to all features.

Smart EXpert ID

EXpert ID is a revolutionary peak identification program which combines traditional peak ID routines with real world analysis techniques to provide the most accurate method for a user to solve qualitative analysis problems. Complex overlaps are deconvoluted and trace peaks are identified, resulting in the best automatic peak identification available.

Smart Drift

Smart Drift takes away all drift concerns from the user. It automatically monitors and dynamically adjusts the parameters to account for the changes in drift.

Smart Data Management

The TEAM™ EDS software increases the ease of use and provides organization through simplified file management. Data is saved as a project and presented as a project tree for interactive review and archiving of images, maps, spectra, and reports.

Conclusion

Ease of use is at the core of the TEAM™ EDS Analysis System. Built-in analytical intelligence assists the user as needed, offering maximum flexibility. Results are easy to obtain, analyze, and present. Regardless of the experience level of the user, TEAM™ EDS Analysis System provides exceptional results every time.

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