

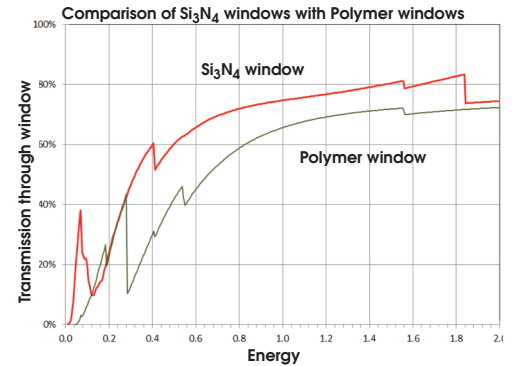


- Compact designs, easily integrated into an industrial environment
- High performance SDD for SEM EDS
- Optimized for low energy X-ray transmission to increase efficiency of light element detection
- Easy to use APEX software with touch screen capability
- Fast, efficient results for industrial needs
- Advanced, low-noise electronics

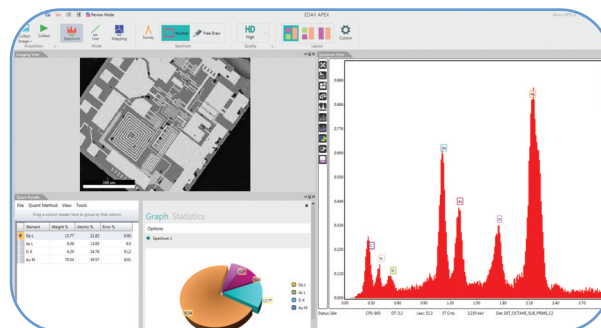
The Element Energy Dispersive Spectroscopy (EDS) System delivers powerful analytical capability in a compact package, maximizing performance and flexibility, while providing streamlined operation to guarantee fast results and ease of use. It is focused on the industrial market, where application specific problems need to be solved quickly and accurately. The combination of an Element Silicon Drift Detector (SDD) with the user-friendly APEX™ software provides a complete EDS microanalysis solution for all levels of analysis and high throughput industrial applications.

### Element SDDs

- Excellent resolution
- Designed with a silicon nitride ( $\text{Si}_3\text{N}_4$ ) window to optimize low energy X-ray transmission for light element analysis
- Advanced low-noise electronics for outstanding throughput
- Small footprint offers flexibility to ensure ideal geometry and data collection conditions



### APEX™ Software Platform



The intuitive and user-friendly APEX™ 64 bit software platform for the Element EDS System has been developed with a focus on industrial needs, which ensures high end results combined with ease of use. APEX™ software simplifies compositional analysis and delivers high quality data processing with accurate and reliable results. The user interface can be customized for a specific workflow, offering a wide choice of layouts, colors and data report formats.

## Features

- Element SDD - 30 mm<sup>2</sup>
- Si<sub>3</sub>N<sub>4</sub> window
- 129 eV resolution at Mn K
- Hermetically sealed vacuum encapsulated module
- X-ray Input > 1M cps
- Throughput > 300 kcps
- Peak/Background > 10,000/1
- Stable resolution
- Detection range: Be to Am
- Thermoelectric Peltier cooling (fan and LN free)
- Fixed or manual slide options

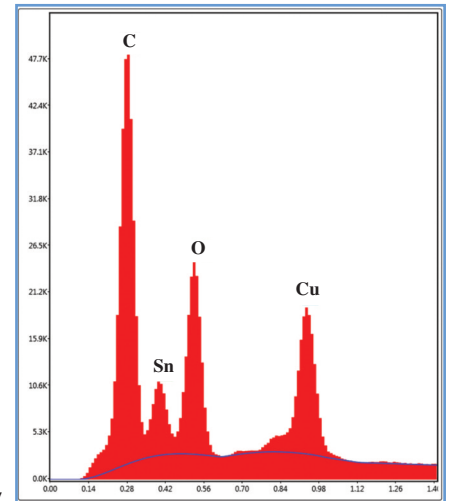
## Benefits

### Outstanding light element results and best low energy performance

- 5 kV spectrum of a cross section of a printed circuit board showing a low energy Sn M peak in between C K and O K peaks of the epoxy.

### Reliability

- The design of the SDDs with the materials properties and durability of the Si<sub>3</sub>N<sub>4</sub> window offer the most robust and reliable detectors for EDS applications. The unique module design means that they are corrosion and shock resistant and suitable for plasma cleaning.



## Conclusion

The Element EDS System offers powerful analytical capability and market-leading performance. It is compact and has a small footprint, which makes it ideal for use in the growing tabletop and compact scanning electron microscope markets. With a great price to performance ratio, Element is all about getting results as quickly and as accurately as possible, which makes it an ideal tool for industrial applications.

## APEX™ Software Options

Feature	Basic	Advanced
Analysis	✓	✓
Data Management & Reporting	✓	✓
Smart Quant	✓	✓
Linescan Acquisition	✓	✓
Multipoint Analysis	✓	✓
Smart Touch w/Monitor	✓	✓
Spectra Survey	✓	✓
EDS CPS Mapping	✓	✓
Net Quant Map and Rebuild Net	✓	✓
Maps Auto Enhance Processing	✓	✓
Spectra Auto Processing	✓	✓
Quant map & rebuild		✓
Spectrum Matching		✓
EDS Advanced Linescan		✓