The Lambda™ Wavelength Dispersive Spectrometry (WDS) Analysis System combines the EDAX WDS software with state-of-the-art spectrometers for improved accuracy and precision, guaranteeing the best results for your materials analysis.

Designed for parallel beam operation, the Lambda spectrometers are available in models:

**Lambda Plus** - Delivers the maximum efficiency for transition element energies from 150 eV to 10 keV (B Kα to Ge Kα) using polycapillary optics.

**Lambda Super** - Dual optics system that provides the ultimate efficacy for light elements, especially B, C, N, and O using high-collection, reflective, patent-pending X-ray optics. This combined with the polycapillary optics, extends the high intensity up to 16 keV, for a total range of operation from 100 eV to 16 keV.

The compact design of the Lambda spectrometers allows for easy installation on any standard Energy Dispersive Spectroscopy (EDS) port. The Lambda spectrometers provide a perfect complementary tool for EDS analysis.

**Scanning Modes**

The Lambda spectrometers can scan over the entire energy range to cover at least one X-ray line for each element in the periodic table.

**Scanning mode options include:**

- Automatic acquisition of one or many EDS elements
- Ability to customize the scan range to your application using spectral Swipe Mode or manual input
- User-selectable step size and speed
- Peak and background modes for a selection of elements
  - Define elements through an intuitive periodic table interface
  - Software suggests diffractor, peak, and background positions

**Qualitative and Quantitative Analysis**

The EDAX WDS software with Smart Quant provides users with qualitative and quantitative measurements. Simultaneously collect and overlay EDS and WDS data for easy qualitative confirmation. The analyst can select a technique (EDS or WDS) for quantification of a desired element to improve precision and detection limits.

- Fitted with combined capillary and reflective optics to produce an intense parallel X-ray beam
- Optimized to cover low energy and transition element energies from 100 eV up to 16 keV
- Intuitive EDAX WDS software
- Compact spectrometer design for easy installation on standard EDS ports
- Standard with five diffractors optimized for any application
- Resolves most peak overlaps of the transition elements
## Specifications

- Optimized for low energy and transition element energies from 100 eV to 16 keV (Be K to Zr K)
- Automatically positions the optic to within 1 µm for accurate quantification measurements
- Lambda Plus
  Default Diffractors:
  - 4.02 Å LIF200
  - 8.74 Å PET
  - 30 Å
  - 60 Å
  - 80 Å
  - 110 Å (optional)
- Lambda Super
  Default Diffractors:
  - 2.84 Å LIF220
  - 8.74 Å PET
  - 30 Å
  - 60 Å
  - 110 Å
  - 195 Å (optional)
  - 4.02 Å LIF220 (optional)
  - 100 Å (optional)
- Lightweight: 45 lbs (20.5 kg)

## Features and Benefits

### Compact Design
- Fits all SEM chambers with an available high-angle port
- Installs on standard EDS port - No special chamber or port required

### Sensitivity
- Combines X-ray optics and compact design to deliver superior count rates

### High Count Rates and Peak-to-Background Ratios
- Rapid X-ray analysis at the best resolution available
- Excellent resolution of the K lines of transition elements
- Able to resolve most elemental overlaps

### Ease of Alignment
- Automated routines improve operation, performance, and accuracy of data

### Seamless Integration with EDS and Easy to Use Software
- Intuitive operation for EDS and WDS users
- Improved X-ray microanalysis
- Covers the entire periodic table

### Smart Focus
The Smart Focus routine is a feature of the EDAX WDS software. The automated routine adjusts the sample height to focus the WDS signal and thereby enable the optimum performance of the spectrometer.

### Conclusion
The Lambda WDS Analysis System facilitates the capture of the highest spectral resolutions and count rates available, improving quantification and detection limits, plus resolving most peak overlaps of elements. The easy to use WDS software interface ensures reliable results for all users and provides smart insight into high precision microanalysis.