

## ● QUANTAX Compact

QUANTAX Compact is a new innovative and easy-to-use EDS system for daily use.

QUANTAX Compact consists of a XFlash® 600Mini silicon drift detector (SDD), a small electronics unit and the intuitive software ESPRIT Compact.

The system performs qualitative and quantitative analyses of all materials with an element range from boron (5) to californium (98). Besides composition analysis at individual spots on the sample surface, QUANTAX Compact provides powerful line scan and spectral element mapping functions.

By using QUANTAX Compact, the analysis and reporting is completed within seconds.

ESPRIT Compact features:

- High resolution data acquisition
- Three different analysis modes: Objects, LineScan and Mapping
- Automatic or interactive element identification starting from boron (5)
- Accurate element quantification during acquisition
- Display of quantitative results as atomic, weight or oxide percentage
- Color-coded concentration distributions (element maps) for any number of elements within an arbitrary field of view including a unique live peak separation and background removal
- Report generation and print formatting
- Export of results to MS® Word and Excel
- Language options: English, German, Spanish, French, Russian, Chinese, Japanese...



ESPRIT Compact with mapping (a), report (b), line scan (c), and spectrum (d)

### XFlash® 600Mini Detector

- Silicon drift detector (SDD)
- 10 or 30 mm<sup>2</sup> active area
- Ultra-thin window for detection of all elements starting from boron (B)
- Energy resolution for Mn K $\alpha$   $\leq$ 129 eV
- Peltier-cooled, no liquid nitrogen or other cooling agents needed
- No detector warm-up necessary during venting or sample changing
- Vibration-free operation
- Ambient temperature: 15–30 °C
- Humidity: 70% RH or less
- Weight: 1.9 kg

### SCU Scanning Control Unit

The SCU is a standalone device that includes a signal processing unit (Min SVE) and a scan generator. The SCU is connected to any PC using a standard Ethernet connection.

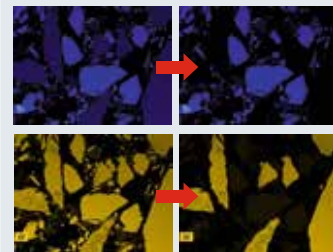
- Power supply: 100–240 VAC, 50/60 Hz
- Power consumption:  $\leq$ 50 W (including detector)

- 4096 channels (2.5 eV/channel)
- Up to 400 kcps output count rate
- Dimensions: 228 x 116 x 66 mm
- Weight: 3.7 kg
- Interface to all types of electron microscopes

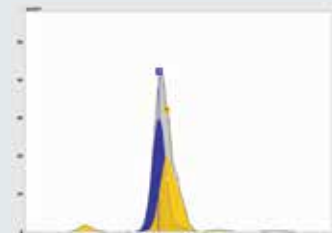
### ESPRIT Compact Software

- Automatic and manual peak ID
- True standardless quantification with improved algorithms
- True 64 bit version (32 bit available)
- Maximum image/map resolution: 4096 x 4096 pixels
- Software options:
  - Object mode (including point, rectangle, ellipse and polygon), LineScan, Hypermap, Report (including export to PDF and MS® Word)
- Spectra comparison with unlimited number of spectra
- Map display in pseudo colors
- Free offline data processing
- Win10 compatible
- Low installation and training effort

### Special features



Live deconvolution to separate overlapping elements in the map, here: silicon (top), and tungsten (bottom)



Sum spectrum (gray) of maps above and deconvoluted element peaks for silicon (blue) and tungsten (yellow)



XFlash® 600Mini detector

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