

ElvaX Mobile is a portable EDXRF analyzer for testing a wide variety of materials. The sampling tray, similar to a benchtop instrument, allows the convenient placement of XRF sample cups. The high resolution SDD detector and absence of collimators ensures a high count rate...crucial for quick detection of trace elements. The **ElvaX Mobile** analyzer is indispensable for testing soil and petrochemicals, or any other applications where testing solids, liquids and powders is required on site. The PDA integrated into the instrument has an intuitive interface as well as a bright, high resolution screen. **ElvaX Mobile** can be synchronized with a desktop computer via Wi-Fi or Bluetooth. The instrument is as light and easy to carry as an ordinary briefcase.

- Cabinet type XRF system uses same PDA as the ProSpector handheld system
- Precious and non-precious metals analysis
- Measurable range Cl- U with capability to measure to Mg
- Also compatible with the ElvaX software package for use with a desktop or laptop computer
- Designed for field use as an alternative to a handheld XRF system

Specifications

Measurement Capability

Detectable Range: Cl (17) - U (92), capability to measure to Mg with Ag tube and SDD detector

Detectable

Concentration: Below 10 PPM range for most elements in a light matrix, 0.01% for metal alloys

X-Ray Generation

X-Ray Tube: Au or Aq target anode, air cooled, other tube targets available

X-Ray Generator: 4-40 kV (adjustable in 0.1 kV steps), 0-100 μA (adjustable in 0.2 μA steps), 4 W max

Stability: 0.1% over 8 hours

Beam Size: 3 x 4 mm. (Special order up to 10 mm)

X-Ray Detection

Standard Detector: Si-Pin (165 eV FWHM @ 5.9 kev), Thermoelectrically cooled

6 mm²/500 um/ ML Collimator / 0.5 mil Be window

Optional Detector: High resolution SDD (\---145 eV FWHM @5,95 keV)/25 mm²

Chamber

Dimensions/Weight: Standard chamber: 16" x 13" x 6.5", 12 lbs

Power Supply: Battery operating life, up to 8 hrs **Pulse Processing:** Ultra fast digital pulse processor

Software

Operating System: Windows CE/Mobile for PDA

Windows XP/7 for PC when using optional ElvaX[™] analysis package

Automatic spectrum calibration/adjustment before spectrum processing

User customizable data printout

Control: X-ray source output, data acquisition system parameters, sample and filter selection (optional)

Data Acquisition Time: 10 - 1200 sec

Spectrum Processing: Automatic peak search, peak deconvolution, background removal, automatic element

identification, net peak intensities above background

Quantitative Analysis: Fundamental parameters, quadratic stepwise multiple

Algorithms: Regression, manual spectra comparison

Optional: Dual task measurement capability, available with filter package

Alloy database, ElvaX supplied database 300 – 10,000 alloy list

User customized alloy database available

