

ElvaX MOBILE

Portable X-Ray
Fluorescence
Spectrometer



Elvatech

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 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 blue tooth. The instrument is as light and easy to carry as an ordinary briefcase. All you need is a level surface to put it on and it's ready for work in seconds.

- Cabinet Type XRF system uses the same PDA as the ProSpector
- Precious and Non-Precious Metals Analysis
- Measureable range Cl-U with capability to measure to Mg
- Also compatible with the ElvaX Software package for use with a desktop or laptop computer
- Perfect system for field use where a handheld system won't do the trick

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 μ A (adjustable in 0.2 μ A 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 μ m/ 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: 410 mm x 330 mm x 170 mm, 7 kg without accessories

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 ElvaXTM 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.

