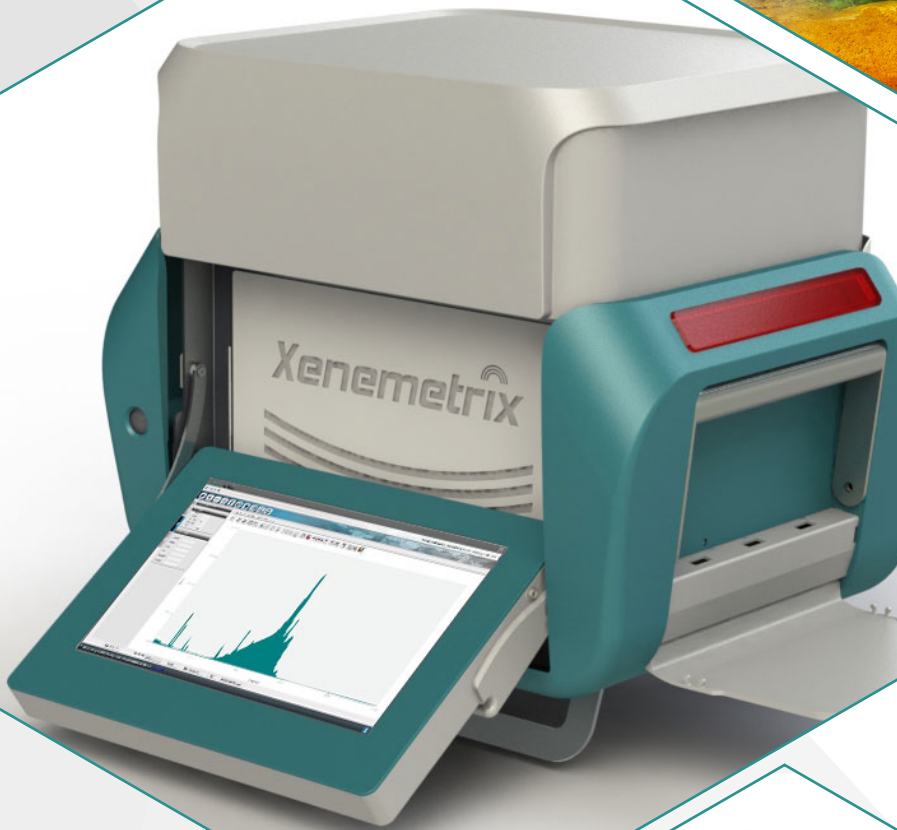


P-Metrix

EDXRF Portable Spectrometer

We take the laboratory to the field



Portable field lab with high performance, adjustable filters, automatic calibration, mini camera and the largest testing chamber



Laboratory quality with fast field results

The P-Metrix is engineered to provide a portable field laboratory with safe and superior Energy-Dispersive X-Ray Fluorescence (EDXRF) quantitative and qualitative analysis. P-Metrix is a high-power analyser that incorporates performances and safety of a top-grade EDXRF benchtop analyser, combined with easy mobility and cost-effective benefits of a portable device and field engineered.

Non-destructive elemental analysis

Quantitative and qualitative analysis from Mg (12) to U (92) from ppm to 100% concentrations

Silicon Drift Detector (SDD)

SDD with higher-count rate and resolution, down to 125eV for improved analysis

X-Ray source

Excitation of 50kV, 10W with Rh anode providing onsite lab quality excellent performance for complex field applications

Tube filters

Variety of six adjustable tube filters for High performances

Automatic calibration

System automatic calibration upon materials for ambient atmosphere adjustment

Large testing chamber

The largest sealed testing chamber available for portable XRF systems

User-friendly operation

Fully integrated PC and industrialized touchscreen

CMOS mini camera

Integrated camera for full identification of the area of interest

Advanced Analytix SW

Implemented advanced Analytix SW analysis package for fast, easy-to-use performance for immediate action and results in the field

Mobility to the field

Battery operated and sealed rugged ergonomic carrying case

Standalone portable lab

Field working station - P-Metrix opens into a standalone, accessible portable lab

Self-service

Designed for self-service with low maintenance, easy replacement of instruments components such as: detector, tube, MCA, controller and PC board.





P-Metrix portability

P-Metrix weighs only 14 kg and due to its ergonomic design it is the perfect choice for field laboratory use. P-Metrix optional sealed rugged ergonomic carrying case opens into a standalone, stable, accessible portable lab with comfortable automatic opening and closing process, providing bench-top quality ease of use at the field. P-Metrix can operate upon battery (up to 4 hours) as a standalone system in the field. The battery can be charged by a car charger, extra batteries and an additional external charger are available to support extended period of working hours in the field.



High level performance and power

- **Largest chamber size in market:** 30.4 X 26.45 X 10 cm
- **X-Ray tube** of 50kV, 10W- delivers extraordinary limits of detection (LOD's) from Mg (12) to U (92)
- **Silicon Drift Detector (SDD)** enables extremely high count rate applications with tube enables excellent energy resolution, down to 125eV
- **Six-position primary beam filters** reduces noise allow for optimal detection performance across the periodic table
- **On-board PC with touchscreen** offers full operation of the P-Metrix in any environment including: SSD hard drive, GPS, GPRS, WiFi, Mini HDMI and USB interfaces
- **Micro spot size** that can reach down to ~1 mm
- **Mini video camera** for observation of samples
- **Sample in-tray sensor**, indicates that the sample is left in the chamber once the system is off
- **Helium and vacuum** atmosphere to increase capability of detecting light elements

Security and safety

- System is active only when chamber is closed
- Accelerometer included to abort measurement if the system has been moved during process
- Built-in X-Ray shielding
- Password protection
- Sample in tray sensor

P-Metrix application range

Petrochemical & Petroleum elemental analysis

P-Metrix provides accurate determination of trace to percent levels of elements in fuels, oils and lubricants. Our superior solutions cover the full production process, from research and development stage up to processing and quality control.

To be used for a wide variety of Petrochemical & Petroleum applications in order to identify elements and determine the actual elemental concentrations present in various matrices (solid, powder, and liquid samples). P-Metrix offers a low cost quantitative analysis method that achieves fast results with no need for sample preparation, and comply with numerous ASTM standards and regulations.



Key applications include:

- ASTM D7212, D7220, D7039, D7751, D5453 and ISO 8754, 13032, 20846, 20884, 13032, 20847, IP531.
- ASTM D4294 (sulfur analysis).
- Monitoring of Mo, Ba, Mn.
- ASTM D6481 (unused lubricating oils): Ca, P, Zn, S;
- Monitoring of wear metals: Sb, Sn, Mo, Ti, Ni, Cd, Fe, V, Pb, Cr, Cu.
- Analysis of P, S, Ca & Zn in Lube Oil

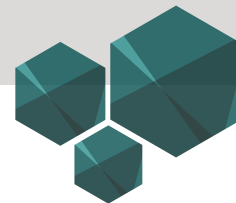
Mining & Geochemistry elemental analysis



P-Metrix provides on-site quantitative analysis of mining and minerals materials. The portable system reduce the time for receiving results from days to seconds, making it ideal also for the exploration industry, delivering excellent precision and accuracy levels for critical measurements, including low LODs.

Specialized applications:

- iron, uranium
- Coal, diamonds, limestone
- Oil shale, rock salt and potash
- Precious metals – gold (Au), silver (Ag), platinum (Pt), palladium (Pd).
- L-lines, rare earth elements.
- Cassiterite, cadmium, and antimony. CuO_2 , Cd, Sb.
- Light elements, such as, Mg, Al, Si, P, S and Cl



Metals & Alloys elemental analysis

P-Metrix plays a dominant role in quality control of the various metal industry processes. Non-destructive elemental analysis can be performed in each step of the process, from ores to finished alloys.

System is capable of easy and fast sorting between different steel grades, as well as forming a convenient tool for QA processing, providing immediate results. Alloy analysis using P-Metrix, supported by sophisticated analytical libraries has become a standard practice. P-Metrix identifies most alloys and performs complete chemical analysis within a few seconds, providing quick and easy sorting and identification of different grades of alloys.



Grades of alloys:

- Iron and steel
- Low alloy and carbon steel
- Stainless steel
- Copper, brass\lead, bronze, aluminium bronze\lead, aluminium
- Nickel alloys, zinc alloys, cobalt alloys, titanium alloys
- Solders-tin, lead and silver

Food and agriculture elemental analysis



Soil composition and use of fertilizers, as well as of nutrient uptake and levels of potentially toxic elements within the plants and crops, is critical within the agri-food sector. EDXRF is an established analytical technique in this industry, the P-Metrix enables fast, accurate and precise measurement, providing qualitative and quantitative results. Various minerals and metals are being added during the food production process for extra nutritional value, that must be closely monitored to comply with food administration regulations such as the FDA and the European Medicines Agency (EMA). This analysis also identifies undesirable additives and contaminations that may be found in raw and processed food.

Several well-known applications include:

- Iron in flour, rice and other grain
- Calcium in orange juice, cheese, and other foods
- Iron in powdered milk
- Aluminium and phosphorus in dough

P-Metrix software: Analytix

- ◆ **Accurate**, comprehensive and easy-to-understand results.
- ◆ **Wide variety of applications**, adaptable to multiple tests performed within a short time and minimum configuration efforts.
- ◆ **Simple user-friendly GUI**, designed with a highly intuitive interface, that can be operated by different levels of users for a wide variety of elemental analysis tasks.
- ◆ **Client-server network operator mode**: real-time data transfer by Wi-Fi or GPRS, enables easy management of multiple systems at disperse global locations. Analysis can be easily performed onsite while results can be transferred to any distributed client.

Analytix features

Fundamental Parameters analysis:

The fundamental Parameter method Enables standardless calibrations, correlates between the measured X-ray intensities and the elemental concentrations in samples, based on X-ray physics and measured values of fundamental atomic parameters in the ED-XRF region of the spectra.

Advanced quantitative & qualitative analysis:

Predefined customized procedures for quantitative and qualitative spectroscopic analysis.

Fast analysis:

Quick and accurate spectral acquisition and qualitative analysis with auto-peak identification.

Deep analysis:

Advanced spectral acquisition and qualitative analysis, with six different sequential acquisitions and pre-defined procedures included.

Auto-calibration:

Automatic energy shift correction calibration upon true samples.

Libraries:

Defining alloy grade, resulting composition of elements, providing quantitative analysis, composition and other properties of the alloy material.

Automatic energy calibration

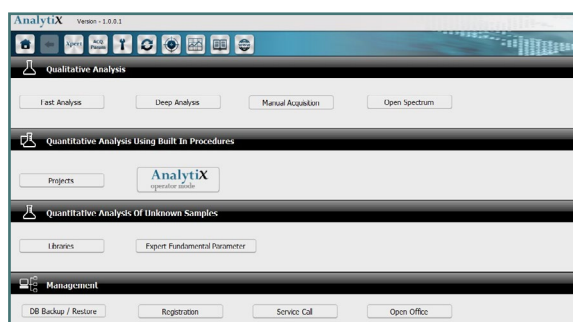
Normalization, matching and validation of tube intensity.

Analysis results features:

Manual Peak ID, User Annotation, Overlap and ROI.

Client-server network operator mode:

The Analytix operator mode enables storing data in the "cloud" - Suitable for organizations that utilize multiple systems and require a central control for both application and system maintenance.





Client-server operator mode

Analytix operator mode suits either compact portable analyzers that can easily be transported between sites, or a robust lab system that can be installed in a distributed laboratory.

Stand-alone / Client-server

Analytix operator mode can operate in a stand-alone mode wherein all data and results are stored locally, as well as in a client-server configuration wherein all results and data are updated in real-time or upon request to the company's HQ server. This enables easy management of multiple systems at disperses global locations and collecting data from different sites into the company's central server.

GPRS / Wi-Fi / LAN / GPS

Analytix software supports GPRS / Wi-Fi / LAN / GPS connectivity, that enable location-based data to be transferred immediately to the company's HQ server for reporting and monitoring.

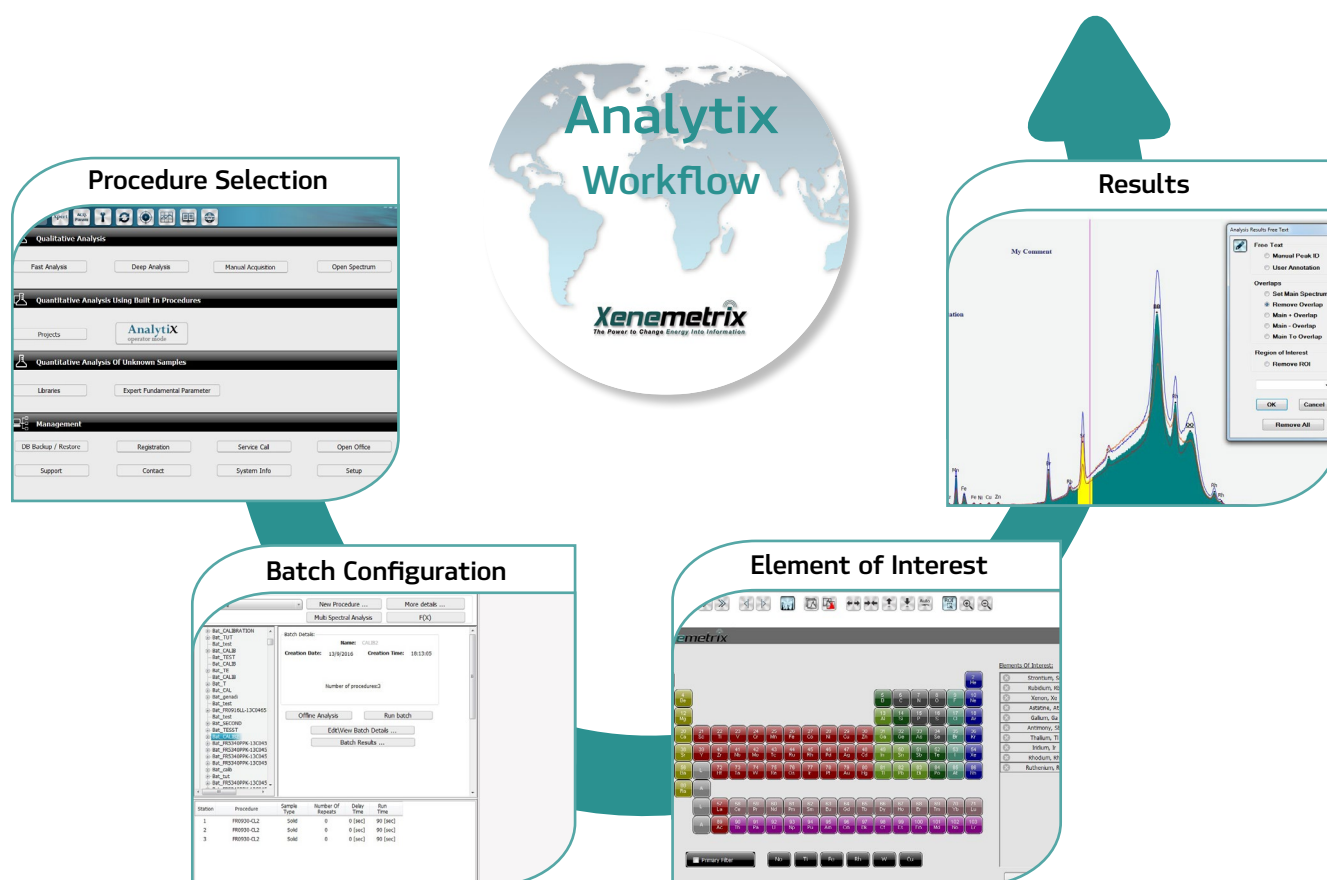
Fast processing

Analytix operator mode is an advanced software package with strong analytical capabilities. The user-friendly system enables an operator to perform multiple tests within a short time and at minimum effort.

Analytix workflow

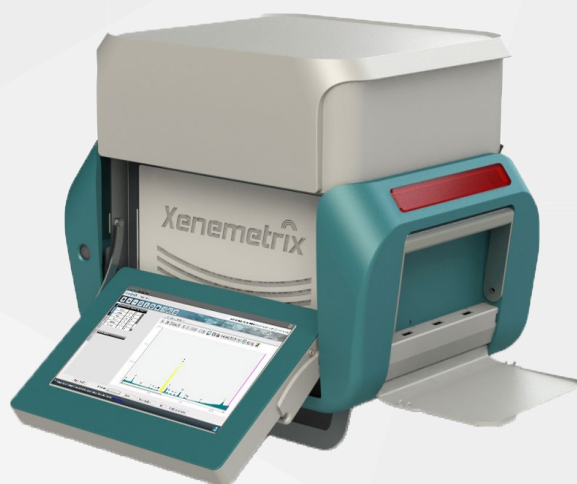
High-end ED-XRF solution with real-time analytic data collection - matching your analytical needs.

Easy creation of analytic procedures



P-Metrix technical specifications

Detector	Silicon Drift Detector (SDD) with Be window resolution, down to 125eV
Excitation	X-Ray Source of 50kV, 10W with Rh anode
Elemental Analysis Range	Mg (12) to U (92)
Detectable Concentration	ppm - %100
Dimensions	Weight: 14 Kg (30 lb) Transport: 40.2W x 30.2L x 24H Operation: 40.2W x 30.2L x 28.5H Chamber: 30.4 x 26.45 x 10 cm
Tube Filters	6 software selectable (customized)
Micro spot	Collimator - 1 mm
Camera	CMOS mini video camera HD (1280x1024)
Work Environment	Air / Helium / Vacuum atmosphere
Power Supply	AC 220/100V power adaptor
Hardware	Integrated PC with touchscreen SSD hard drive GPS, GPRS, WiFi Mini HDMI USB interfaces
Software	AnalytiX analysis package (Running under Microsoft Windows™ OS)
Options	Excitation: Ag \ W \ Au \ Mo anode
	Power Supply: - 4 hour Li-ion battery - 12 V DC car charging cable - External charger
	Sealed rugged carrying case: - Opens into a standalone, accessible portable lab - automatic opening \ closing sequence - Semi-automatic folding sequence Sample cup holder with sample in-tray sensor - indicates that the sample is left in chamber once system is off



Worldwide Distributions:

North America, Latin America, Europe, Asia & Pacific,
Australia, Africa & Middle East

Xenometrix is a leading designer, manufacturer and marketer of Energy-Dispersive X-Ray Fluorescence (ED-XRF) systems. With more than 30 years experience, Xenometrix continues to develop highly innovative technologies and solutions suitable for today's ever-growing analytical challenges. Xenometrix combines the latest technological developments with innovative engineering, to provide cost-effective solutions to a wide range of industries and applications.

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