

Article Overview

SciAps offers advanced handheld spectrometers for elemental and mineral analysis, including LIBS, XRF, and Vis-NIR technologies, designed for field and laboratory use.

Overview of SciAps Spectrometers

SciAps specializes in portable analytical instruments capable of measuring a wide range of elements across industries such as metallurgy, geology, environmental monitoring, and research laboratories. Their handheld spectrometers are designed for precision, portability, and ease of use, allowing in-field analysis without the need for bulky laboratory equipment.

Key Product Lines

1. Z-902 LIBS Analyzer The Z-902 is a handheld Laser-Induced Breakdown Spectroscopy (LIBS) analyzer optimized for carbon and elemental analysis in steels, stainless steels, and other alloys. Key features include:

- o Detection of carbon levels as low as 70 ppm (0.007%)
- o Classification of stainless steel into Low (L) and High (H) carbon grades
- o Optional Carbon Equivalent (CE) calculation for weldability assessment
- o Argon purge system to reduce spectral interference and improve accuracy
- o Lightweight and ergonomic design (~1.97 kg) for prolonged field use
- o Android-based user interface with multi-spot laser measurement to minimize surface inhomogeneity errors

The Z-902 Alloy variant extends capabilities to aluminum, titanium, nickel, and cobalt alloys, with factory calibration for 15-20 elements and customizable calibration options.

2. XRF Analyzers SciAps XRF analyzers are lightweight, fast, and high-precision X-ray guns for elemental analysis. They are ideal for material sorting, environmental testing, and lead paint analysis without radioactive sources, making them safe and convenient for field use.

3. reveNIR Vis-NIR Analyzer The reveNIR is a handheld Visible-Near Infrared (Vis-NIR) spectrometer designed for mineral exploration and reconnaissance. Its features include:

- o Spectral range of 350-2510 nm for detecting mineralogical transitions
- o Lightweight and compact design for remote and rugged terrains
- o Real-time analysis to guide drilling and exploration decisions
- o Preloaded mineral spectral library with 200 key exploration minerals, with options for user additions
- o High portability, suitable for helicopter or field transport

Applications

SciAps spectrometers are widely used in:



SciAps Spectrometer

- o Metallurgy and alloy analysis: Carbon content measurement, alloy sorting, and quality control
- o Geology and mining: Mineral identification, pathfinder mineral detection, and ore body exploration
- o Environmental and regulatory testing: Lead paint detection, RCRA and EPA priority pollutant metals
- o Research and field studies: Portable, real-time elemental and mineralogical analysis in challenging environments

Advantages

- o Portability: Handheld design reduces operator fatigue and allows field deployment
 - o Precision: High sensitivity for low-concentration elements and carbon detection
 - o Versatility: Multiple spectrometer types (LIBS, XRF, Vis-NIR) on a unified software platform
 - o User-friendly: Ergonomic design, Android interface, and customizable calibration options
 - o Safety: Non-radioactive XRF options and argon-purged LIBS for accurate measurements
- SciAps spectrometers provide a comprehensive solution for in-field and laboratory elemental and mineral analysis, combining advanced technology with portability and ease of use.

Powerful laser, on-board argon purge and high resolution spectrometer are built for carbon. Narrow profile for accessing the tightest

Patented spectrometer design The Z-900 Series uses a patented stack-spectrometer design that delivers wide wavelength range

The laser strike pattern, cleaning shots, spectrometer settings are all under user control. The analyzer

Whether you're testing in the field, on-site, or in the lab, our powerful handheld LIBS (Laser-Induced

SciAps, a global leader in scientific instruments and technology solutions, is excited to announce the launch of its new

Whether working in materials sciences, chemistry, geology, ocean sciences, physics, or archeology the Z handheld LIBS is perfect

SciAps's analyzers are used for a wide variety of end-use applications, ranging from alloy analysis, mining and

Can the Z-903 detect all elements? Yes -- with its extended spectrometer range of 190 nm to 950 nm, the

SciAps's mission is to provide durable, field-tested, portable instruments to identify any compound, any mineral, any



Sciaps Spectrometer

SciAps X-Series The world's lightest, smallest, fastest, high precision XRF analyzers The SciAps X-Series

The Z-902 is the the world's first handheld analyzer to deliver carbon content continues to get better.

It is our 3-spectrometer system, spanning a wavelength range of 190 nm - 950 nm. This range allows for the entire periodic table to

The Z-903 accomplishes what no other portable analyzer has done. It's a handheld analyzer that measures every element in the

The SciAps Z-903 is a portable Laser-Induced Breakdown Spectroscopy (LIBS) analyzer designed for

Identification of stainless steel and low alloy steels, including carbon analysis down to 70 ppm and instant

The most advanced handheld XRF technology available, led by a 55 kV X-ray tube for extra low detection

Web: <https://bssoda.pl>

