# Highest Performance LIBS Analyzers

# Features Unique Dual-Burn Technology

Air-burn for fast material sorting and screening Argon-purge for precision and superior limits of detection





Elemental Analysis Alloys – Mining – Environmental – Forensics – General Analytical Analysis



# The Z-900 Series

# A nicely loaded LIBS system designed for usability, durability, and safety

Full range of applications, from basic material sorting and screening to exacting elemental analysis.

# **Z-901**

### Alloy Analysis

SciAps offers the only LIBS-based alloy analyzer operable in a "dual burn" test setup.

#### OuickSort

Air-Burn for rapid material sorting or grade identification.

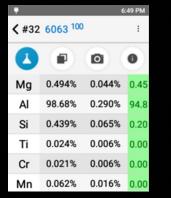
#### Alloy

Argon-Purge for high precision and improved detection limits. Many customers use argon-purge to analyze and sell mill-ready aluminum scrap. Quantify low ppm levels of beryllium, boron and lithium.\*

Alloy

QuickSort

Choose Alloy or QuickSort



In 1-2 seconds, Z-901 provides alloy chemistry, grade, and specification data

 $st_{
m The}$  Z-902 model with two spectrometers is required to measure lithium emission at 610 nm. See reverse for more information on models and range.

**High-resolution display** rear-facing display for easy viewing



Intuitive Android operating system, with app based software



### Mining, Exploration, and **Environmental Applications**

LIBS complements handheld XRF because it is especially good at measuring low atomic number elements including those too light for handheld XRF.

Lithium • in ores and brines.

**Light elements** • full suite of light elements in soils and ores including Li, Be, B, C, F and Na.

Organic carbon • total organic carbon in agricultural applications.

**Beryllium** • in soil or other materials as an environmental contaminant.



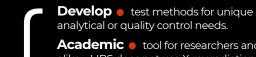


Advanced spectrometer design for high resolution and wide range.



#### More Applications Forensics, Quality Control, Research, Education

The Z-900 Series features our desktop/tablet ProfileBuilder software package to add elements, create calibrations and apply advanced spectral processing.



analytical or quality control needs.

Academic • tool for researchers and students alike – LIBS does not use X-ray radiation or its accompanying regulations.

Forensics • Small spot analysis (100 um) and ProfileBuilder yield a powerful, highly versatile field analytical technique.



The Z is currently used at multiple government facilities for beryllium screening and clean-up





#### Internal camera

precise targeting of analysis location.



#### Macro camera

photo documentation of samples, reading barcodes and QR codes.



#### **Report generation**

full-featured, with available cloud data management and reporting.



ဂျက

### Narrow snout

tapered for welds or difficult-to-access test locations.

#### Laser safety sensor

patented sample sensor allows Class 1 operation, subject to LSO approval

#### Rugged metal body

Maximum durability and minimal service costs.



## **Z-900 Series Models**

Model	Spectrometers	Range	Elements Analyzed <sup>1,2</sup>
Z-901	1 spectrometer	200 – 420 nm	Factory calibrated with suites of 15-20 elements, app dependent. For some elements, model 902 or 903 is required.
Z-901 CSi	1 spectrometer	190 – 240 nm	Analyzes carbon and silicon only. The perfect complement to your XRF.
Z-902	2 spectrometers	190 – 625 nm	Adds emissions for Li, Na
Z-903	3 spectrometers	190 – 950 nm	Adds emissions for H, F, N, O, Br, Cl, Rb, Cs and S

<sup>1</sup> Every element is not necessarily factory-calibrated. Factory calibrations are provided for a set 15-20 elements depending on the application.

<sup>2</sup> "All elements" excludes unstable and radioactive elements. Detection limits vary greatly by element and sample type.

#### **One Box**

Pair any Z Series with our industry-leading XRF unit and get optimal analysis across every element in the periodic table and every sample type!

#### XRF

Great for transition and heavy metals. Easy to use especially on bulk, soil, and ore type materials.

#### LIBS

Analyze elements XRF can't test: Li, Be, B, C, F, Na and more Improved performance on Mg, Ca, K compared to XRF Microanalysis capability with 100 um laser spot size.

FEB2021

SciAps Inc.

Sciaps.com 7 Constitution Way Woburn, MA 01801 sales@sciaps.com



EndoMatrix (M) Sdn Bhd No. 51-5, Block G, Dataran Prima, Jalan PJU 1/37, 47301 Petaling Jaya, Selangor Darul Ehsan, Malaysia. Phone: +6018 280 1682 | Fax: +603 7803 1147 sales@endomatrix.com.my | www.endomatrix.com.my

