



SciAps Z-70 **NEW!**

Specifications

An economical LIBS for fast and easy alloy grade identification and chemistry without the hassle of X-ray licensing

- A powerful Class 3b laser source (1064nm, 3-6mJ) reduces the need to prepare sample surfaces
- Includes high-resolution spectrometer for a spectral range of 190 – 625 nm



The unique air pump filter in SciAps Z-70 effectively prevents unwanted dirt from entering the testing chamber, reducing the need to constantly clean the chamber.

When it comes to scrap sorting, X-ray analysis is the preferred method because of its ability to analyze a wide range of alloys. However, in states with X-ray licensing rules and regulations, XRF can be a hassle. That's where SciAps Z-70 LIBS comes in.

The Z-70 utilizes laser induced breakdown spectroscopy (LIBS) for fast and easy alloy grade identification and chemistry. The Z-70 platform features a powerful Class 3b laser source (1064nm, 3-6mJ) with a 50 um diameter burn spot and 50 Hz laser pulse rate, including rapid sample cleaning to reduce need to prepare sample surfaces. Its integrated air pump reduces dirt buildup in analysis path. Internal sample presence sensor acts as an interlock and allows for operation of device under Class 1M conditions, subject to local LSO approval.

SciAps Z-70 utilizes cutting-edge material ID technology, offering rapid and hassle-free sorting without the need for X-ray licensing.



Precision, Versatility, and Reliability

The Z-70 also includes a high-resolution spectrometer for a spectral range of 190 – 625 nm. An integrated camera allows for easy viewing of tests by operators and assures good burns for curved or small pieces. A macro camera provides photo documentation of materials and reads Barcodes or QR codes for easy sample information upload. Settable, one-dimensional beam rastering for testing wires, inclusions or material veins. Weighing 4.4 lbs. with battery and 3.5" high-brightness rear-facing display for easy results viewing. Google-powered, Apps-based Android operating system provides Smartphone level simplicity and intuitive operation. WIFI and Bluetooth built in for easy connectivity to other devices.

Multiple Alloy Bases and Pre-calibrated Elements Included in the Alloy ID App

Aluminum	Li, Be, Mg, Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Zn, Zr, Pb, Bi, Ag, Sn
Copper	Be, Al, Si, Cr, Mn, Fe, Ni, Cu, Zn, Se, Ag, Sn, Pb, Bi
Magnesium	Mg, Al, Mn, Cu, Zn
Titanium	Al, Ti, V, Cr, Fe, Cu, Zr, Nb, Mo, Sn
Iron	Al, Si, Ti, V, Cr, Mn, Fe, Cu, Ni, Nb, Mo, W, Pb
Stainless Steels	Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Nb, Mo, W
Nickel	Al, Si, Ti, Cr, Mn, Fe, Co, Ni, Cu, Nb, Mo, W

For more information, or to schedule a demonstration:

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SciAps



SciAps Z-70 Specifications

**Fast, Precise
Metal Sorting**

**Economical
Handheld LIBS**

**Minimal Regulatory
Requirements**

Weight	4.19 lbs. / 1.9 kg with battery
Dimensions	10.73" x 3.35" x 10.24" / 270 x 260 x 85 mm
Display	3.5" high brightness, color touchscreen, readable in all lighting conditions. Rear facing display for easy results viewing.
Power	On-board rechargeable Li-ion battery, rechargeable inside device or with external charger, AC power
Processing Electronics	ARM Quad Cortex -A53 1.2 GHz Memory: 2 GB LPDDR3, 16 GB eMMC
Data Storage	Results storage: 32 GB SD
Connectivity	Built on Google's Android platform for real-time data exporting, including built-in WiFi (IEEE 802.11b/g/n), Bluetooth (BR/EDR+BLE), GPS and USB-C to connect to virtually any information management system
Sample Viewing	Integrated camera and laser target indicator for viewing sample before and during analysis for proper sample alignment. Includes second "macro camera" for scanning QR or barcodes and for photo-documentation and report generation
Laser Raster	On-board Y stage for rastering laser to discrete locations for targeted analysis or averaging
Atmosphere	SciAps proprietary Opti-Purge provides an air pump and filter that helps sustain clean window during testing
Calibration Check	316 stainless steel standard for automated calibration and wavelength scale validation
Drift Correction	On-board automated drift correction software with factory-provided calibrations
Regulatory	CE, RoHS, USFDA registered. Class 3b laser. Sample sensor on board, allows for operation under Class 1 conditions, subject to local LSO approval
Spectral Range	190 – 625 nm
Calibrations	Aluminum: Li, Be, Mg, Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Zn, Zr, Pb, Bi, Ag, Sn Copper: Be, Al, Si, Cr, Mn, Fe, Ni, Cu, Zn, Se, Ag, Sn, Pb, Bi Magnesium: Mg, Al, Mn, Cu, Zn Titanium: Al, Ti, V, Cr, Fe, Cu, Zr, Nb, Mo, Sn Iron: Al, Si, Ti, V, Cr, Mn, Fe, Cu, Ni, Nb, Mo, W, Pb Stainless Steels: Al, Si, Ti, V, Cr, Mn, Fe, Ni, Cu, Nb, Mo, W Nickel: Al, Si, Ti, Cr, Mn, Fe, Co, Ni, Cu, Nb, Mo, W Enabled but not Calibrated Elements: Ag, Au, Cd, Cr, Co, Fe, Hf, Mn, Mo, Nb, Ni, Pb, Re, Sb, Sn, Stainless, Ta, Ti, V, W, Zn, Zr
Security	Password protected; multi-user support with configurable access settings

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