



# SciAps Z-9 Specifications

#### The world's first LIBS analyzer with dual-burn technology

SciAps Z-9 offers fast, quantitative testing results in air and/or argon purge, depending on your requirements. It's the perfect alternative to the old competitors portable LIBS units— we've worked closely with the users to provide the performance and operation our customers have come to expect, and after extensive side-by-side testing, we're pleased to introduce the lighter, more flexible Z-9. It includes 1-second tests and expanded Ti and Al libraries compatible with our user expectations.

Air-burn operation for six alloybases:

Al, Ti, stainless,

Fe, Ni and Cu

Optional "Alloy Argon Purge" App for higher precision if needed Detect down to 10 ppm Be contamination in aluminum and copper alloys

With argon purge, measure down to 10 ppm B in aluminum alloys

#### The new performance standard

The Z-9 is 1 lb. lighter than the previous LIBS models, weighing in at about 3.5 lbs. The internal camera and flatter nose-plate make for easier testing on curved or irregular surfaces. A macro-camera allows for photo-documentation of samples, bar codes and report generation. The Z-9 may be operated under Class 1 conditions, provided sample sensor is engaged (engaged by default, factory password protected).

#### Reliable tests

For the metals industry, the Z-9 is an inexpensive but reliable alloy sorting device, mostly for aluminum, titanium alloys, and stainless. The Z-9 does not measure lithium directly. If you require Li, then the Z Series Z-50 or Z-200 is right for you.



#### Features novel "dual-burn" technology

At some operations, air-burn analysis is satisfactory for fast alloy sorting or identification, but argon purge is occasionally needed for more precise analysis or more challenging materials. The Z-9 "dual-burn" analyzer features calibrations for both air- and argon-purge analysis, allowing the operator to seamlessly transition between test methods. If your facility forbids argon canisters then use air-burn only. Otherwise consider the dual-burn option for optimal testing across all materials.







XRF & LIBS

### Need high precision on high-temps?

**Sci**Aps

The Z-9 will reliably ID high-temp alloys, but we do not recommend use for precise analysis of high temp alloys like nickel, cobalt, refractory alloys and super-alloys. For precise analysis of nickel alloys and other high temps, use SciAps XRF analyzers.

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Weight	3.5 lbs. with battery
Dimensions	10.75" x 2.375" x 8.625"
Display	2.7″ 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, eMMC 16 GB
Data Storage	Results Storage: 8 GB SD
Connectivity	Builton Google's Android platform for real-time data exporting, including built-in Wifi, Bluetooth, GPS and USB to connect to virtually any information management system.
Sample Viewing	On-board, auto-focus camera/video for viewing sample before and during analysis, laser spot finder to show where laser strikes sample. Includes 2nd "macro camera" for viewing sample, reading 3d bar-codes for photo- documentation and report generation.
Laser Raster	On-board Y stage for rastering laser to discrete locations for targeted analysis or averaging. Typically, raster in 3 locations.
Excitation Source	5-6 mJ/pulse, 50 Hz repetition rate, 1064 nm laser source
Operation: Air Burn. Optional "Dual Burn" Technology available	The Z-9 operates in air-burn environment, no argon purge required. Users may add argon-purge at time of purchase or later, to operate with either air or argon purge capability.
Calibration Check	316 stainless steel standard for automated calibration and wavelength scale validation.
Drift Correction	On-board automated drift correction software with factory provided or user provided reference materials.
Grade Library (alloy)	500+ grades, multi-library support, libraries may be added/edited with PC software package (ProfileBuilder).
Regulatory	CE, RoHS, USFDA registered. Class 3b laser. Sample sensor on board, allows for operation under Class 1 conditions, subject to local LSO approval.
Spectrometer/Range	200 nm – 420 nm
Analytical Range	Typically, 15-20 elements calibrated, specific elements depending on alloy base.
Security	Password protected usage (user level) and internal settings (admin)

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For more information, or to schedule a demonstration:

https://quantum-rx.com/ +33 (0)1 60 12 26 94



