

LASER-INDUCED BREAKDOWN SPECTROSCOPY (LIBS)

Handheld LIBS Alloy Analyzer

No radiation • Faster • Accurate • Eye-safe



Multi-element analysis

Detects Al, Cu, Steel, Mg, Ni, Ti, Au, Ag, Pt, Pd and more in a single shot.



Light element detection (Z < 12)

Accurately measures Al, Be, Mg and others beyond traditional XRF capability.



Maximum safety

1535 nm Class 1 eye-safe laser. Zero radiation hazard. IP54 rated.



	含量 (%)	含量 (%)
Fe	69.24	56.00 - 72.00
Cr	15.71	16.00 - 18.00
Ni	10.19	10.00 - 14.00
Mo	3.06	2.00 - 3.00
Mn	0.95	- 2.00
Si	0.33	- 1.00
Cu	0.32	-
Co	0.11	-
V	0.08	-

REQUEST DEMO

Full specifications on page 2



1.75

KG TOTAL WEIGHT



2

SEC DETECTION TIME



8

HOURS BATTERY LIFE



0.05

% DETECTION LIMIT



IP54

ENCLOSURE RATING

TECHNICAL SPECIFICATIONS

LIBS-ALLOY-1535

TECHNICAL PRINCIPLE

LIBS uses a high-energy laser pulse to create a micro-plasma on the sample surface. The light emitted from this plasma is spectrally analyzed to reveal the elemental composition in real time.

Laser pulse → Plasma → Spectrum analysis

PRODUCT CHARACTERISTICS

- **Multi-element analysis** — Simultaneous detection of all target elements
- **Light elements** — Accurate Al, Be, Mg detection ($Z < 12$)
- **Maximum safety** — Class 1 eye-safe, zero radiation
- **Sample versatility** — Direct analysis of solid samples
- **Full connectivity** — BT, 4G, WiFi, USB, GPS

INSTRUMENT

Instrument weight	1.75 kg (with battery)	Power supply	Lithium-ion, 8 hours
Detection time	2 seconds	Operating temp.	0 to 40 °C
Storage temp.	-20 to 60 °C	Enclosure rating	IP54

OPTICS & PERFORMANCE

Laser	1535 nm, Class 1 eye-safe	Detection limit	0.05 %
Stability	Major RSD < 1%, minor < 5%	Camera	Micro-area + photo camera

SYSTEM & DATA

Operating system	Android	Display	5" LCD capacitive touch
Data transfer	BT, 4G, WiFi, USB, GPS	Data format	XLSX
Data storage	16 GB built-in	Operation mode	One-button, fast analysis